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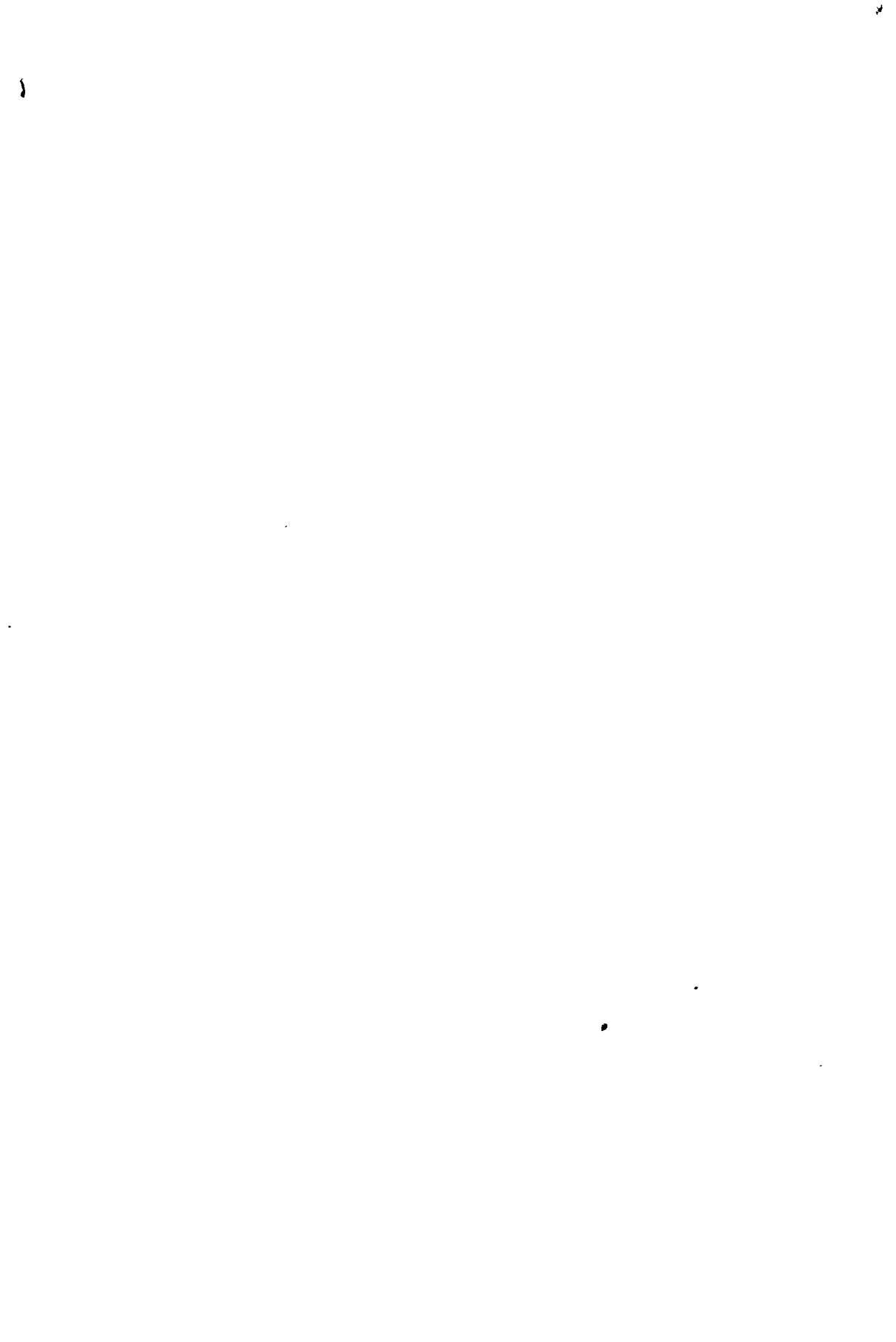
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O. C. GANGOLI

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Torana (gate), Muktesvara Temple, Bhuvanesvara Orissa, C. 950 A.D.

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INDIAN ARCHITECTURE

O. C. GANGOLY

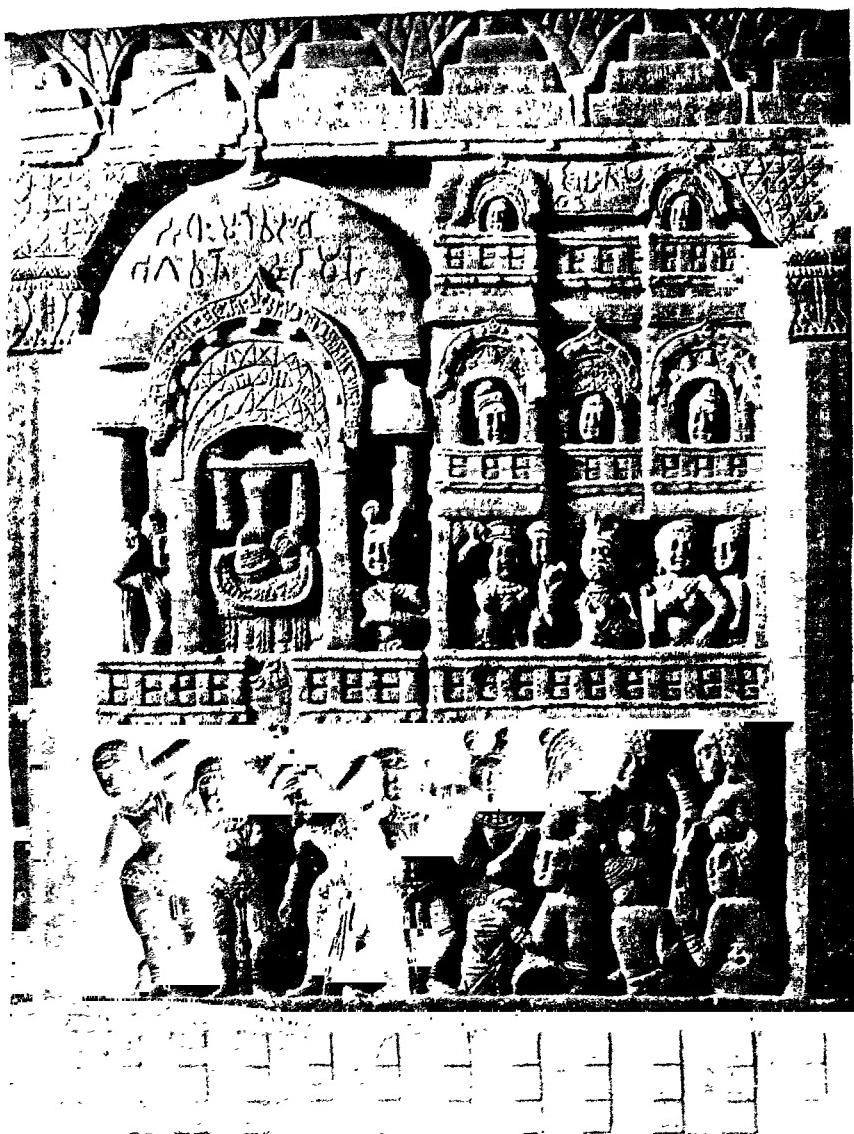
*Sometime Bageswar Professor of Indian
Fine Arts, Calcutta University*

Editor of RUPAM

*Author of
South Indian Bronzes, Raags and Ragas
Masterpieces of Rajput Painting etc.*

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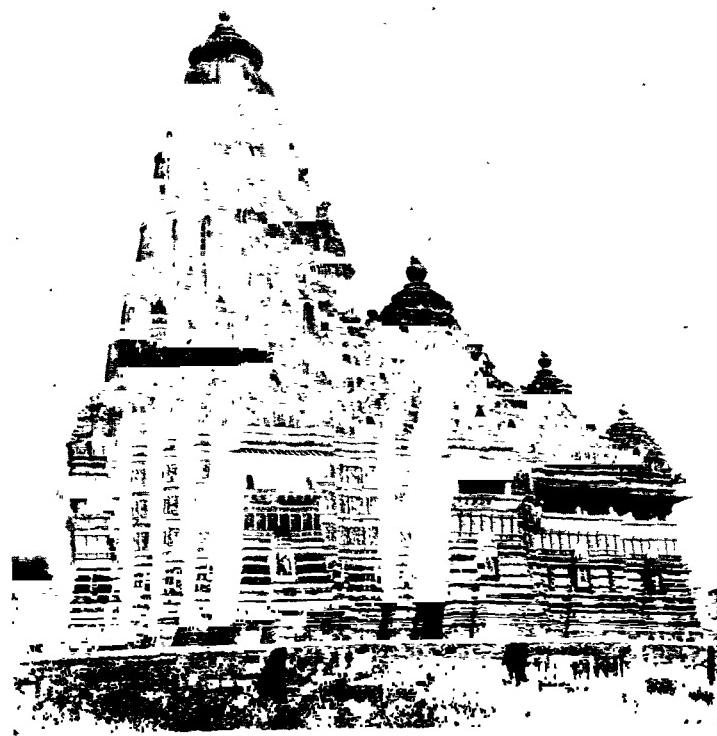
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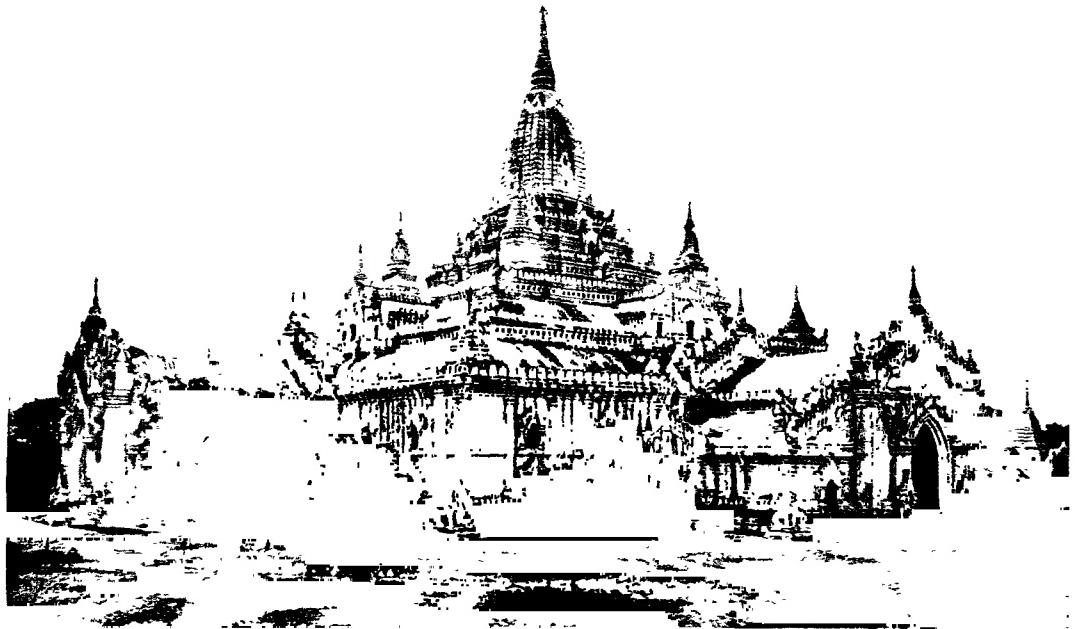
1. Sudhamma Palace, Bharhut, Early 2nd Century B.C.

FROM the absence of any kind of architectural relics of the Vedic period, (2500-800 B. C. according to the estimate of European scholars) it is generally concluded that architecture during this early period of Aryan culture was in a very primitive state. At any rate, architectural attempts of the period must have been carried out in such impermanent materials as earth, or stucco, bamboo or timber. There is no doubt that before stone came into use, timber or bamboo was the only medium for architecture. And in India, as elsewhere, the 'wooden period' preceded the 'stone,' in architectural history.

The Vedic rites themselves called into existence architects for constructing 'Fire-altars' (Yajmavedis) and 'Sacrificial halls' (Yajna-Salas). Originally, these altars must have been very simple platforms, perhaps made of Kusa grass and mud. And the hall must have been a very primitive thatched hut. But the Vedas soon came to be devised in diverse artistic shapes and forms which quickly acquired magical or symbolical significance. Thus in the Taittiriya Samhita different forms of altars are prescribed, e.g., 'falcon', 'chariot', 'man with uplifted arms.' This led to manuals being composed giving rules for measurement and diagrammatic formulae for the construction of these altars such as we find in the Sulva Sutras (C. 800 B.C.). From the description of a 'hall of sacrifice', we find that this sacred ritual edifice, the earliest ancestor

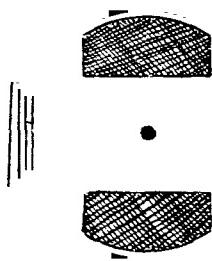


2. Kandarya Mahadeo Temple, Khajuraho, Circa 1000 A.D.

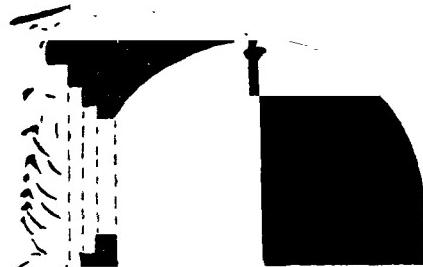


3. Ananda Temple, Pagan, 1082-1090

of all later temples, was made of bamboo, perhaps of reeds and mats, and not even of wood. The period before the use of wood has been justly called the 'thatched period' of Indian architecture, which still survives in Southern India and also in hut structures (*At-chala*, lit., eight sloping roofs) in Bengal. The memory of this thatched construction is perhaps preserved in the circular arches in the architecture of old buildings and palaces pictured on early Buddhist monuments (e.g. Bharhut, Sanchi). There is no doubt, however, that wooden architecture was generally practised, for we find as early as the Rigveda, references to skilled craftsmen, and a special guild called *Ratha Karikas* (builders of chariots). Though wood appears to have been the common material for architecture, stone is occasionally referred to, and the Rigveda (4, 30, XX) actually alludes to 'a house made of a hundred stones' (*Satam asmanmayinam puram*). As the only possible corroboration of this may perhaps be cited a stone relic of a much later period, viz., an inscribed sacrificial stake (*Yupa*) discovered at Ishapur near Mathura, datable about 144 A.D. Certain rock-cut tombs have been discovered at Mennapuram, near Tellicherry, in Kerala (Malabar), which Prof. Jouveau Dubreuil believes, belong to the Vedic age. (4 and 5). They are, in form, 'hollow stupas' that

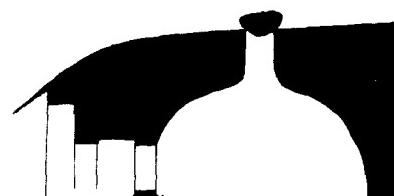


4. Plan of 'hollow stupa'



5. Section of 'hollow stupa,' Mennapuram, Tellicherry.

is to say 'hemispherical in shape.' And one of them has a peculiar slender column in stone at the centre. This pillar was not a structural necessity, but evidently an imitation in stone of earlier wooden structures for which the pillar at the centre performed an important structural function. It is quite possible that this cave is a translation in stone of a very early form of hemispherical hut, which may have existed from times before the Buddhist period. For if we compare the section of this Malabar cave with that of the Sudama cave near Gaya, (Behar) (6), we notice that there is an attempt made to imitate the dome of a hemispherical thatched roof, and the first may be an ancestor of the latter. In a 'hollow cave of hemispherical shape,' with an opening like a chimney at the centre, discovered at Bangla Motta (12 miles north of Cannanore in Malabar) (7 & 8) M. Jouveau Dubreuil believes we have the survival of a Vedic fire-altar in a cave form—a veritable 'house of the sacred fire' (Agnidriya). Curiously, the chimney of this Vedic 'fire-place' occupies exactly the place of the Harmika of the Buddhist Stupas and the form of the latter may perhaps be deduced from this primitive cave shrine.

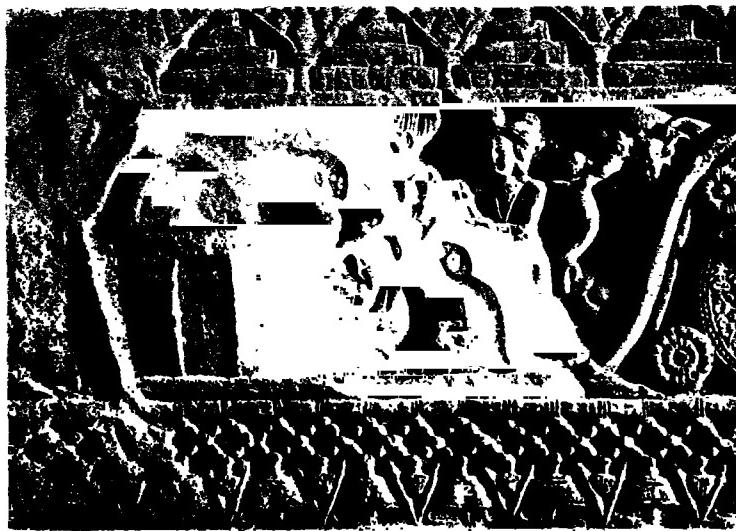


6. Sudama Cave, near Gaya

7 & 8. Hollow Cave, Bangla Motta, Cannanore, Malabar.

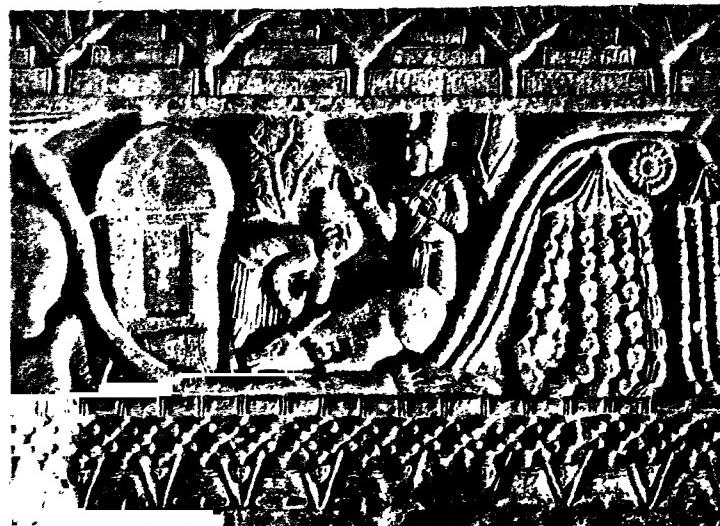
In Indian Epic Literature, there are numerous references to 'abode of Gods,' in the sense of a shrine, or temple of a god (devayatana), but it is impossible to say with certainty to what period of history they belong, and what was their shape or form. In the Ramayana, 'the white washed portals of gods' temples, and even 'the blessed abode of Vishnu' are alluded to. The Mahabharata is also full of similar references, of uncertain chronological value. Of special importance are the various picturesque descriptions of Sabhas, or assembly-halls or palaces. One made for the Pandavas being said to have been inspired by the models of architecture near the Mainaka hill, north of Kailasa. The famous 'lac-pavilion' (Yatu-griha), specially designed for a temporary purpose in flimsy materials, cannot be taken as a common or typical example, for the period pictured in the Epic. A remarkable assembly hall, or palace (sabha) for the Pandavas is said to have been built by Maya Danava, the reputed author of the principles of architecture, recorded in the Maya silpa sastra.

Old Pali literature also bristles with allusions to temples or relic-shrines (chaitya), assembly halls (sabha) and palaces (prasada). Of special significance are the references to Kutagara (peaked huts), a primitive temple hut with a curvilinear roof, of which some representations may be seen on the reliefs from Bharhut (9). Some of the reliefs at Sanchi and Bharhut offer examples of old Buddhistic, or perhaps pre-Buddhistic houses and palaces which are referred to throughout in the Jatakas. Pali Literature frequently refers to the 'science of architecture', viz., Vattu-vijja (vastu-vidya).



9. Kutagoras from reliefs at Bharhut 2nd Cent. B.C.

10. Kutargas from reliefs at Bharhut, Early 2nd Century B.C.

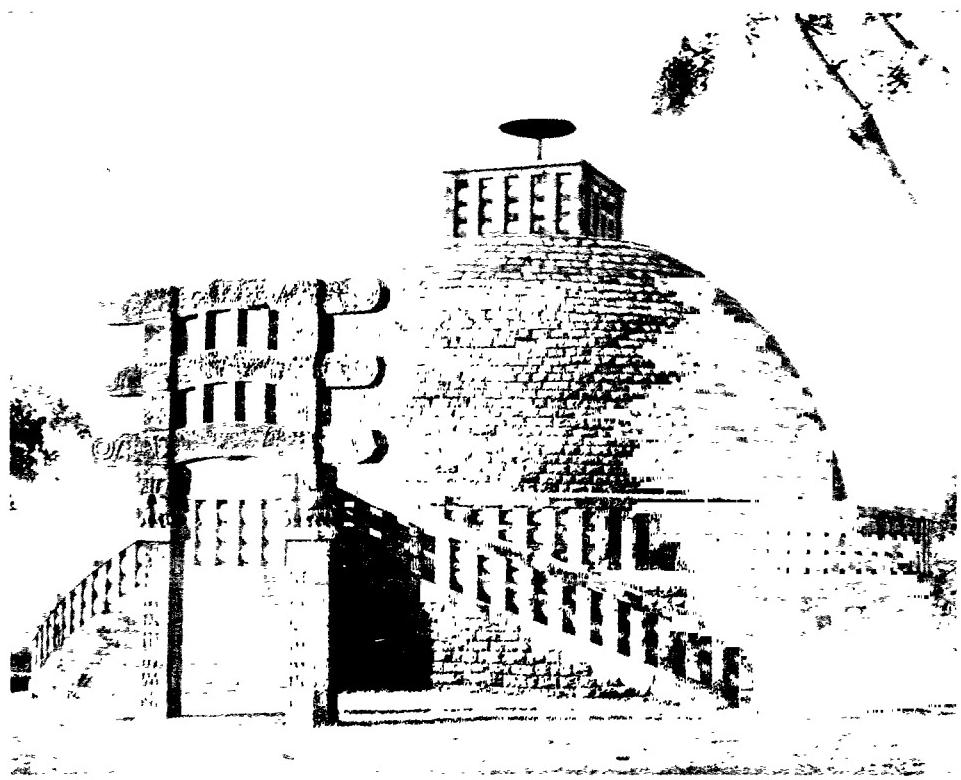


The earliest surviving architectural relics are the so-called Chaityas of the Buddhist period. They are not in any sense specially Buddhistic but were adopted by Buddhists from earlier, perhaps Vedic, architectural models. 'In their iconography as well as in architecture the Buddhists followed the Vedic traditions' (Jouveau Dubreuil). Long before the advent of the Buddha, memorial mounds used to be erected over the relics of holy personages. According to its root meaning, Chaitya (from chita, a funeral pile) denotes anything connected with a funeral pile, e.g. the tumulus raised over the ashes or relics of a dead person. Hence, technically, a Chaitya is a Stupa (something raised), a mound. In a generic sense Chaitya has been understood to mean any relic-shrine, or altar, and generally a place of worship, or a temple. In the epics, it is used as a common equivalent for a temple, an altar, or a shrine. In Buddhist art, it is a mound containing a relic, e.g. ashes, bones, hair, or tooth of the Buddha. Chaitya is a religious term, while Stupa is an architectural equivalent for a relic mound.

The oldest Stupa in brick hitherto discovered is the remnant at Piprawha, on the Nepal frontier, supposed to date about 450 B.C. The remnants of Piprawha Stupa show that bricks must have been used for building long before the birth of Buddhist architecture.

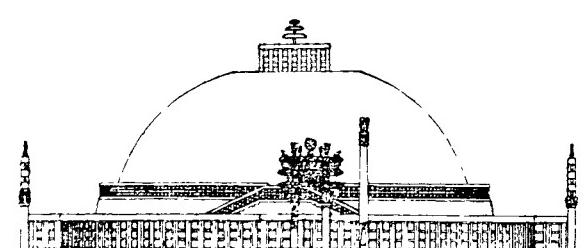
The typical form of the earliest Buddhist building, indeed, of any Indian building, are the Topes (stupas) at Sanchi.* Originally built of brick by Asoka (264-227 B.C.) about the 3rd century B.C., its stone coverings and the railings and gateways are believed to have been added a century later. The

* The Great Stupa at Sanchi having been frequently reproduced, we have chosen for our illustration in Plate II, the Stupa No. 2, which is smaller in size and far less known, but equally typical in form.



11. Stupa No. 2 at Sanchi, Bhopal 3rd to 1st Century B C

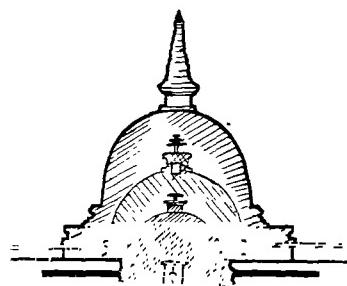
characteristic shape of the Great Stupa at Sanchi may be conveniently studied in a diagram (12). It is an almost hemispherical dome (anda), truncated near the top, and rises from a lofty terrace, which formerly served as the procession path for perambulation (pradaksina).



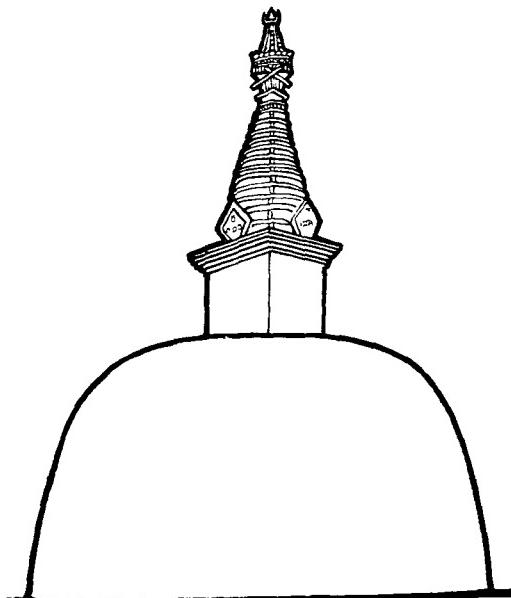
12 Elevation of Great Stupa, Sanchi
Marshall from white Eisestehe.

The dome with the platform is enclosed in a massive balustrade of stone (prakara) which was originally of wood, and copied later in stone. The balustrade or railing consists of posts (stambha) pierced with cross bars (suchi) and mounted by copings (usnisa).

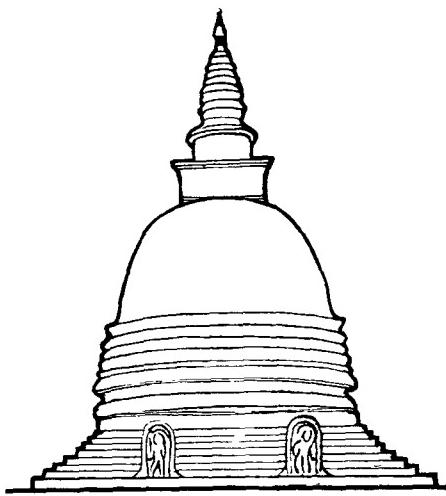
On the summit is a small pavilion (narmika) from which rises the shaft (danda) of the umbrella (chhattra), the Indian emblem of sovereignty signifying the reign of Dharmma, the religious faith propagated by Asoka, the great Buddhist Dharmma-raja. The finial is called the Tee (Hti, a Burmese word). The umbrella, originally one, gradually increased in number and gave an elongated appearance to the later Stupas in Nepal and China, and gradually lengthened out in the shape of the Indo-Aryan spire, the Stupa itself inclining to the form of a tower. The dome underwent gradual modification, as we find in the examples at Ceylon, e.g., Thuparam Dagoba of Anuradhapura, Ceylon (15) datable about 246 B.C. and Swayambhunath Chaitya of Nepal of uncertain date (13). The gigantic segment of the broken dome of the Mirisweti



14. Diagram of Stupa, illustrating development (Archaeological Survey)



13. Chaitya of Swayambhunath, Nepal



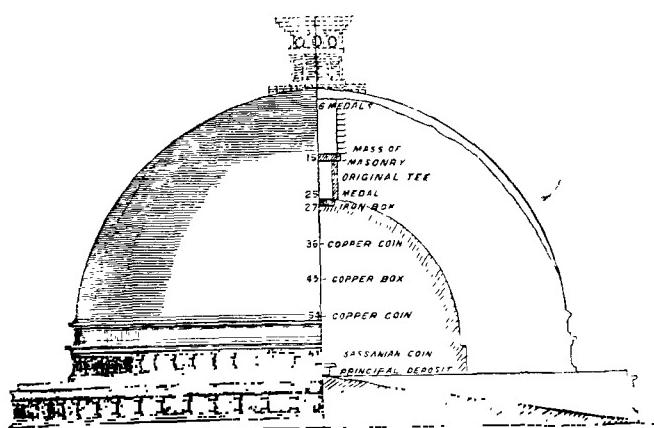
15. Thuparam Dagoba, Anuradhapura.

*Dagoba —Dhatu-garbha, a mound with a relic (dhatu) in its womb, hence, 'a relic mound'

Dagoba at Anuradhapura (16) is interesting on account of its shape. The earlier evolutions are best illustrated in the forms achieved in the Tope at Manikyala (17) 20 miles south-east of Rawalpindi ascribed to about 30 B.C. and the more elaborate example at Ahin Posh in the Jelalabad valley, very cleverly restored by Simpson in the accompanying drawing (18). The important features of the last named Stupa are the storied terrace and the staircase at the four quarters, a scheme which might have been carried to Java—as illustrated in the plan of the Borobudur. In Burma, the early Indian model went through modifications, which evolved forms in which it is difficult to recognize the original prototype. In the Mangalazedi Pagoda, Pagan, (19), dated 1274 A.D. the platform is elevated to storied terraces, and the dome shrinks into a cone, almost merging into the finial which terminates in a spire, the umbrella having disappeared already. But the intermediate stage is well illustrated in the carved representations of the Stupa met with on the marble slabs at Amaravati (20 and 21). One of two which are reproduced here, (20) is of sumptuous effect with its cap or cluster of numerous Chhattras.

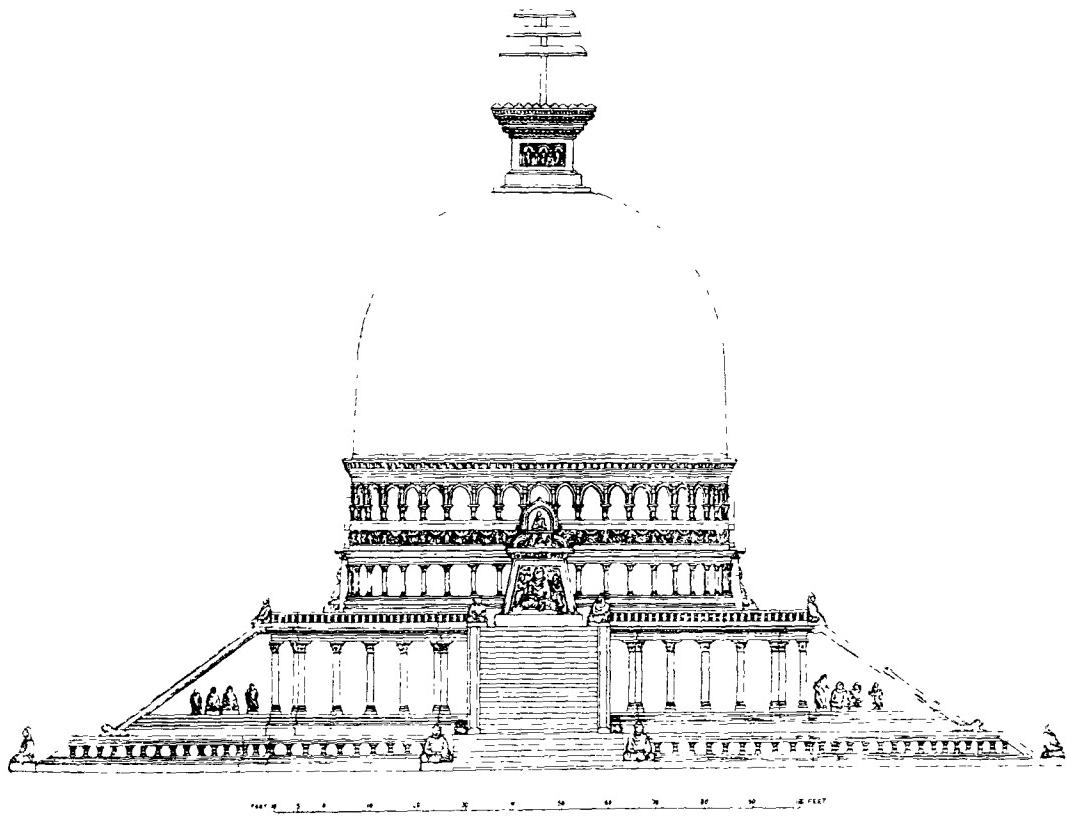


16. Mirisweri Dagoba, Anuradhapura, Ceylon.

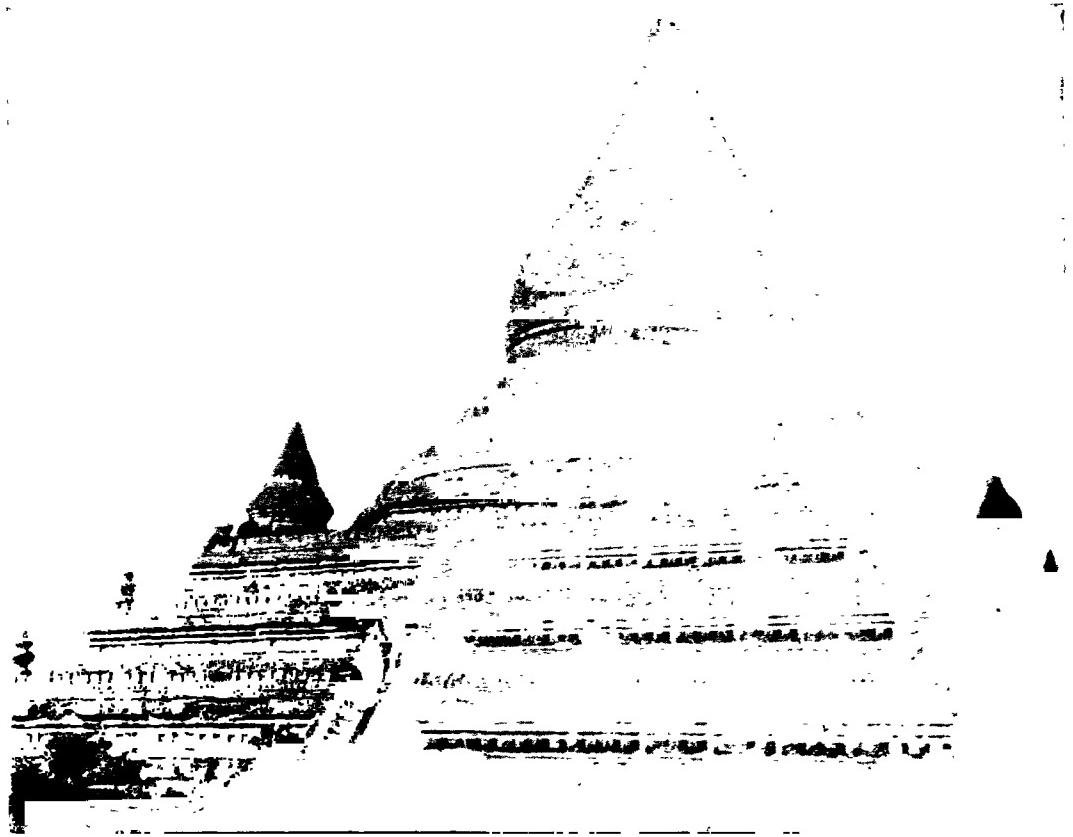


17. Restored Elevation of Tope at Manikyala (Fergusson).

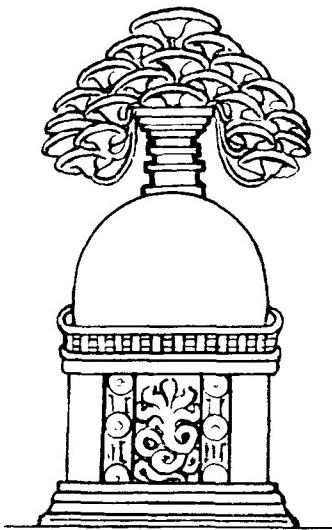
The railings of the Sanchi Topes became a very characteristic feature of Buddhist architecture (22) very well illustrated in the later examples at Bodh Gaya, and the elaborately carved marble railings at Amaravati (1st century B.C. to 2nd century A.D.) and in a somewhat modified form at Anuradhapura in Ceylon (15). The magnificent carved gateways or Toranas best illustrated at Sanchi (23) were introduced into China and Japan along with Buddhist art from India, and are there known as Torii.



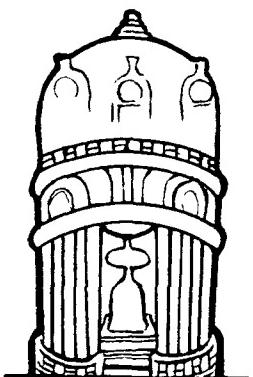
18 Restoration of Ahin Posha Tope (Simpson).

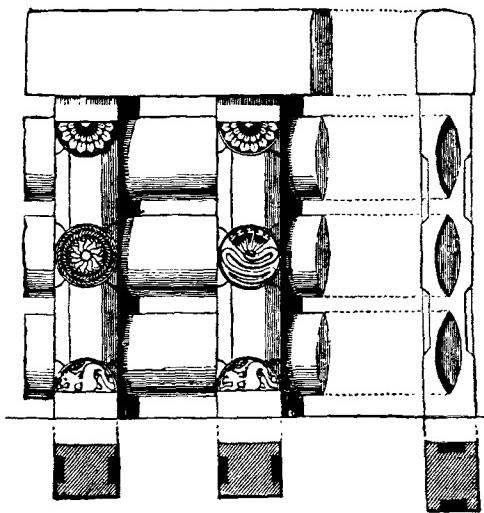


19 Mangalazedi Pagoda, Pagan, 1274 A.D.

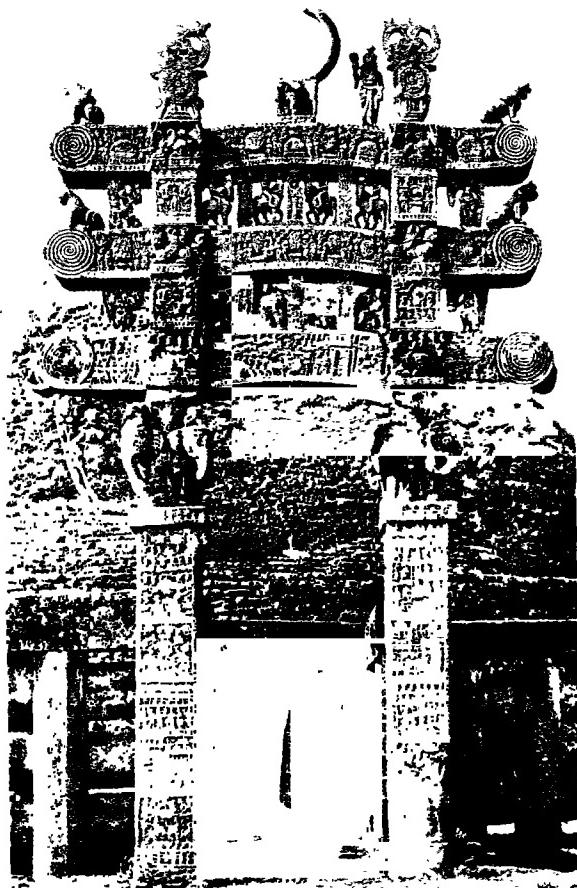


20 & 21 Dagobas from Amaravati
Sculptures



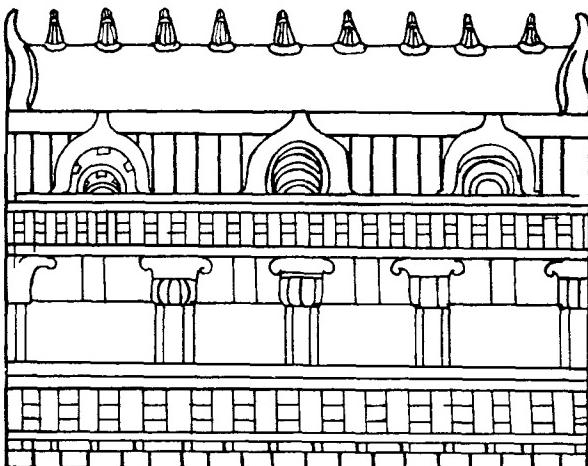


22 Diagram of railing
from Sanchi
Maisey¹.

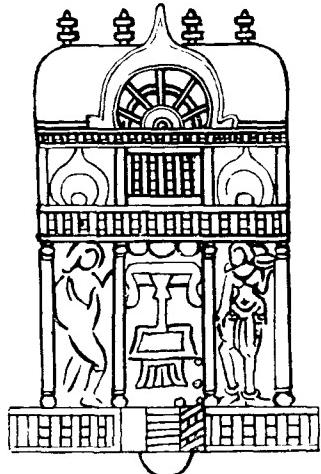


23. North Gateway, Great Stupa
Sanchi, Early 1st Cent. B C

The next typical form of Buddhist architecture is a Chaitya-hall which later evolved into a Vihara, a place of assembly, or college dormitory for the monks of which a very early form is pictured on a stone relief at Bharhut (24) which has a characteristic sloping roof mounted by a row of knobs, evidently ancestors of Kalasas of later times (cp. Pallava temples at Seven Pagodas) a feature repeated in a very interesting two-storied temple inscribed on a slab at Amaravati (25). From very early times, the Vihara has been distinguished from the Chaitya, the latter being regarded as the temple of worship, while the former as the residence or the assembly halls for Buddhist monks. Both forms occur side by side, at Bhaja, Bedsa and Karli. A typical Buddhist Chaitya-hall is, like the Stupa, derived from earlier architectural models. The structural Chaitya-halls were most probably made of wood, and have not survived except in pictured replicas on carved reliefs, as at Bharhut and Amaravati. A novel form of a Buddhist temple, inscribed on a slab from Amaravati, is illustrated in the drawing here reproduced (25). It is in the form of a hall with a Chaitya window, and a barrelled roof mounted by a row of Kalasas (jars) which re-appear, at a later date, on somewhat similar rock-cut forms in the monuments of the Pallavas (cp. Ganesha's Ratha, 28). The typical facades of pre-Buddhistic Chaityas can be well gathered from the excavated Lomasa Risi cave on the Barabar Hill in Behar (3rd century B.C.), evidently a translation of wooden originals (26). This has obviously served as the model for the Bhaja Chaitya-hall, (2nd century B.C.), (27). These Chaitya-halls, (of which the progressive developments can be studied in the examples at Bedsa, Nasik, Karli and Ajanta), consist of a nave and side aisles terminating in an apse or semi-dome. The pillars separating the nave from the aisles are continued round



24. Chaitya Hall from Bharhut Relief

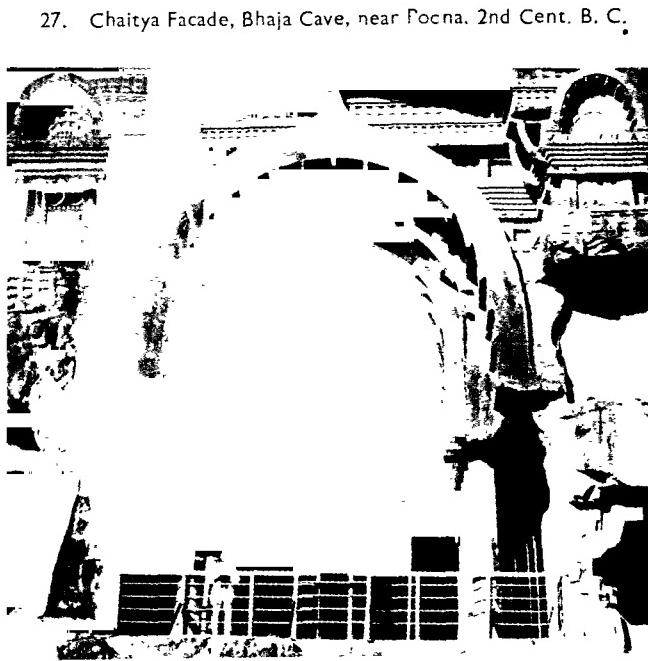


25. Two Storied Temple, Amaravati Relief.

the apse. Under the apse, and in front of the pillars is the rock-cut Stupa much in the same position as an altar in a Christian church. The roof of the Chaitya is a semi-circular covering as illustrated in (29 & 30). The door is opposite the Stupa, over which is a large window shaped like a horse-shoe which Mr. Havell very logically derives from the leaves of the Asvattha (peepul tree).* In the Chaitya-hall at Bedsa (Vidisa) and also in the verandah at Nasik and later at Karli, we come across very interesting developments of the Stambha, the characteristic Indian pillar. A typical Indian pillar, derived from earlier wooden models, is a shaft, stuck into a jar (kalasa) surmounted by a capital or abacus of up-turned lotus, (wrongly identified by archaeologists with the 'shape of a bell') over which on a little cornice (harmikka) are effigies of bulls and horses sometimes mounted by human couples (mithunas). The Stambhas of cave architecture easily recall the famous Asoka pillars carrying effigies of various animals as royal emblems. In the earliest Chaitya-halls

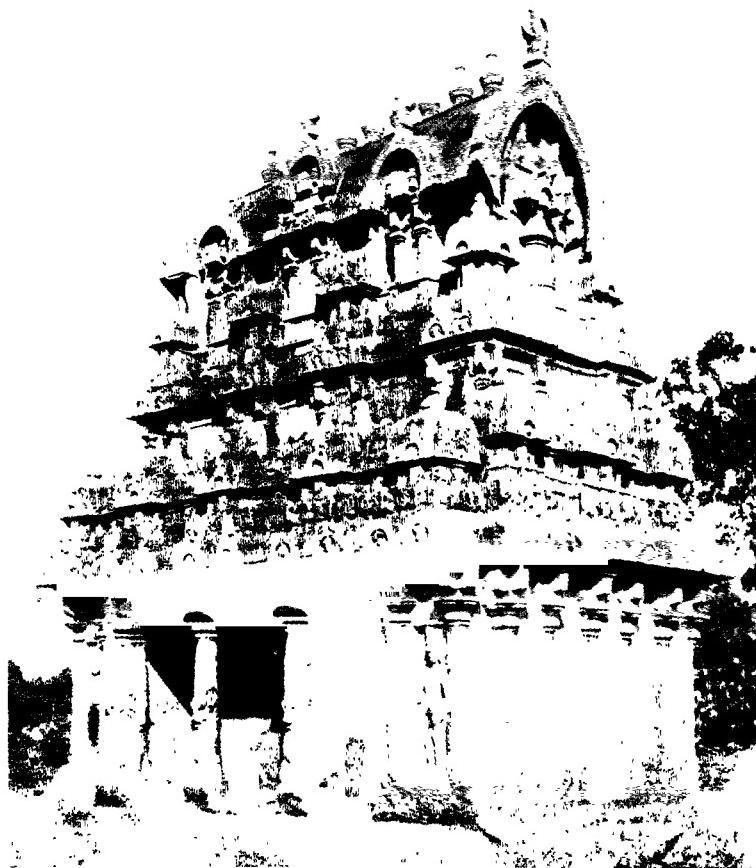


26. Lomasa Risi Cave, Barabar Hill, Behar, 3rd Cent. B. C.



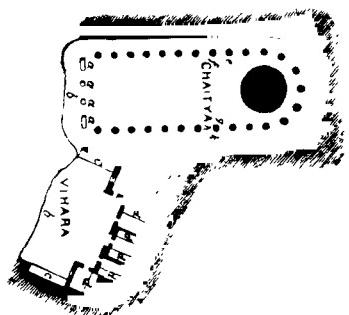
27. Chaitya Facade, Bhaja Cave, near Pocna, 2nd Cent. B. C.

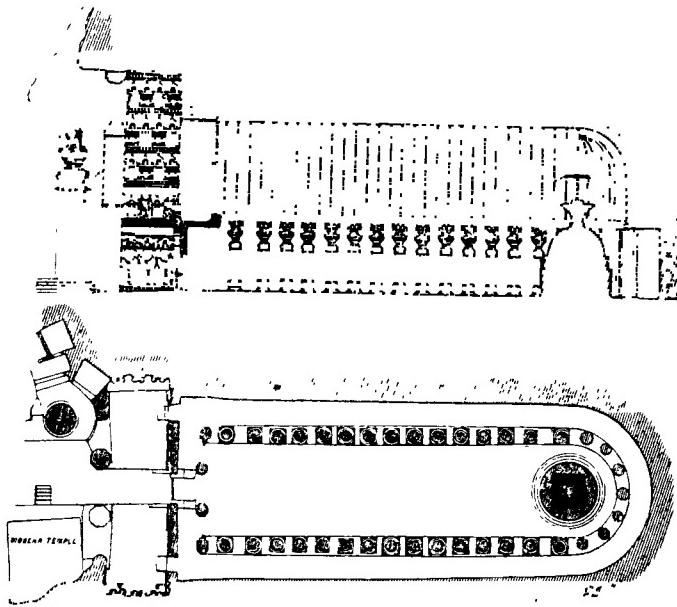
*E. B. Havell: 'Indian Architecture' 1913, page 81.



28. Ganesha's Ratha, Seven
Pagodas, Mahabalipuram.
Circa 625-650

29. Plan of Chaitya
and Vihara Cave, Bhaja
(Fergusson).

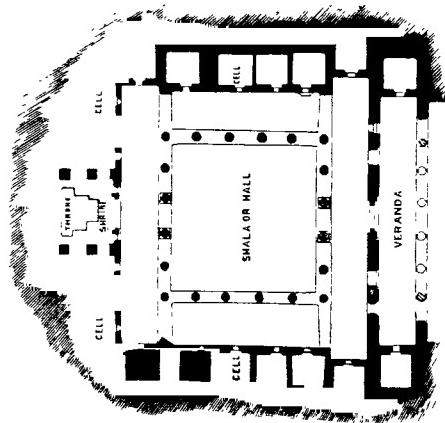




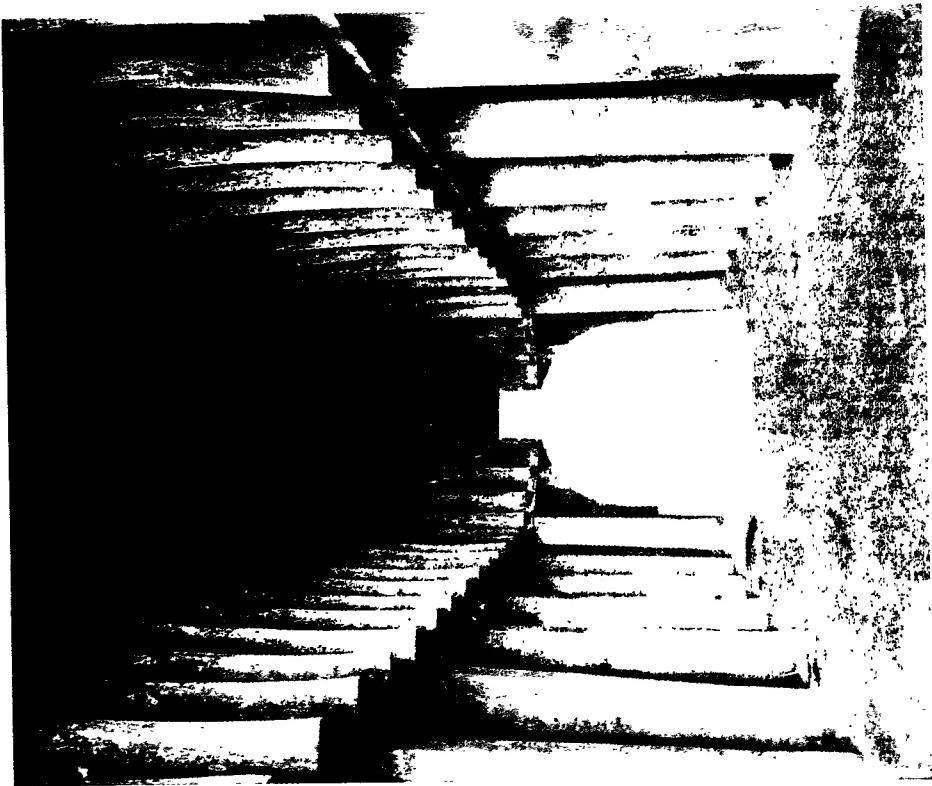
30. Section Plan of Chaitya and Vihara Cave, Bhaja (Fergusson).

many of the mediaeval temples of Rajputana (34). A full-fledged Chaitya-hall is best studied at Cave 19 at Ajanta, 6th century (32 and 33). No structural Chaitya-hall of an earlier period appears to have survived, but we can very well guess what it looked like from some of the Pallava temples at Seven Pagodas, near Madras (28, 35, 36, 37). Although the Buddhist Viharas, and Chaitya-halls, cover a fairly long period, the temple, in the strictly Brahminical sense of an 'image-house' (devata-griha), does not evolve until quite a late period. In the Chaitya-hall at Cave 19 at Ajanta (6th century) we have an elaborate image of the Buddha carved on the pedestal of the Stupa (38) where we notice the temple indicated in embryo. At Kholvi, near Ujjain, as, at one of the caves at Ellora, Berar, the Stupa is carved out into a cell, cp. a representation of a temple on a Dagoba in relief at Amaravati (21), in which is placed the image of the Buddha and finally the semi-circular back of the Stupa is replaced by a square cell, the Garva Griha of the typical Hindu Brahminical temple. The memory of the apsidal back of the Buddhist Chaityas is preserved in an old structural temple, dedicated to Durga, at Aihole (6th century) (39). In the meantime, Indian temple-architecture has evolved some new forms and features which relate to the history of Brahminical worship.

at Bhaja and Bedsa, the pillars are without any capitals (31). They appear with capitals, for the first time, on the verandah of the Nasik cave (1st century B.C.) In the later caves at Ajanta, (32 and 33) and also at Badami, Indian pillars evolve very elaborately ornate shapes of many faces. Sometimes the capital is represented by a compressed jar out of which conventionalised foliages peep out, in richly conceived decorative motifs. This 'jar and foliage' motif is exemplified in many stages of development in



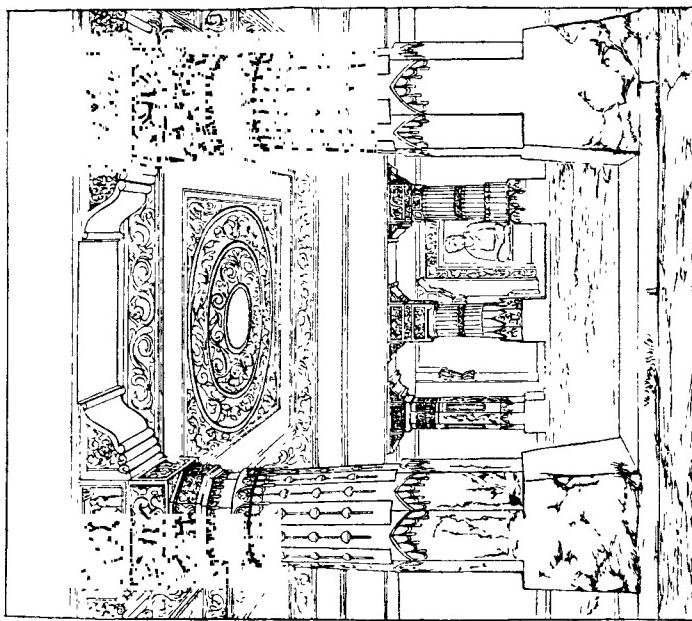
32. Plan of Cave No. 16, Vihara, Ajanta
(Burgess).



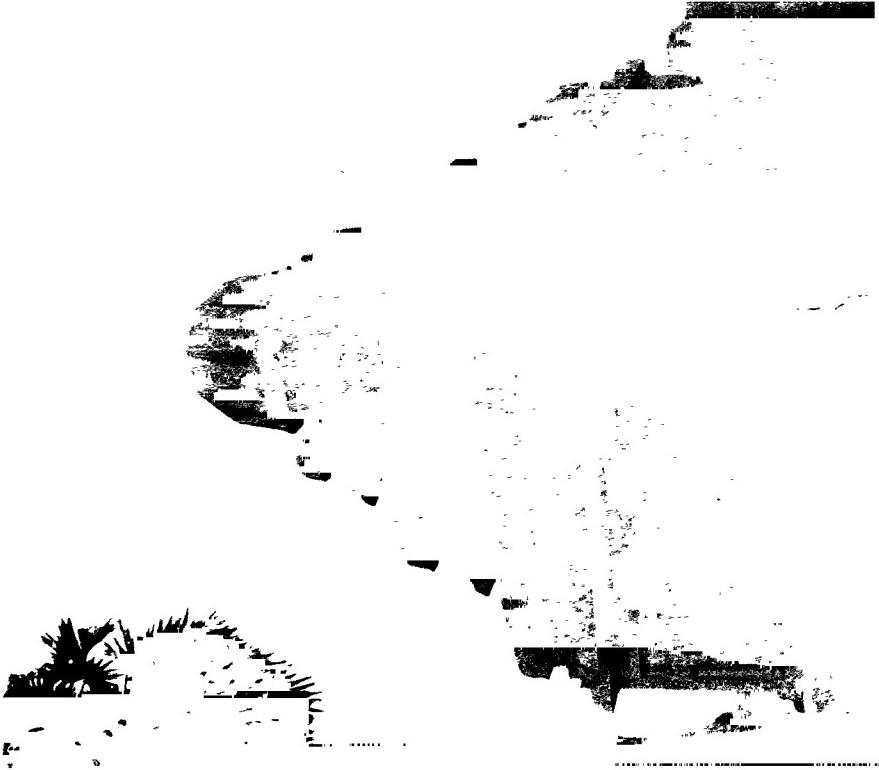
31. Interior of Chaitya Hall, Bhaja, 2nd Century B.C



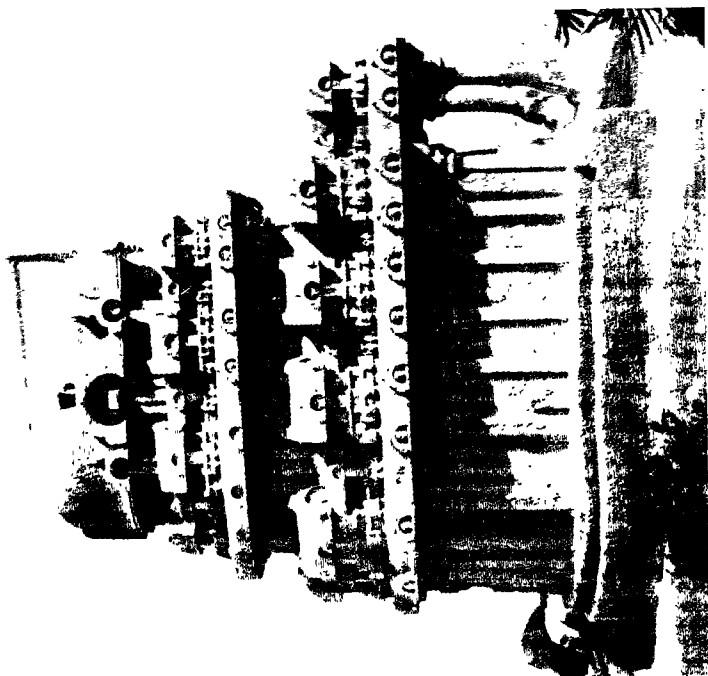
33. View of Interior, Vihara I6, Ajanta (Fergusson).



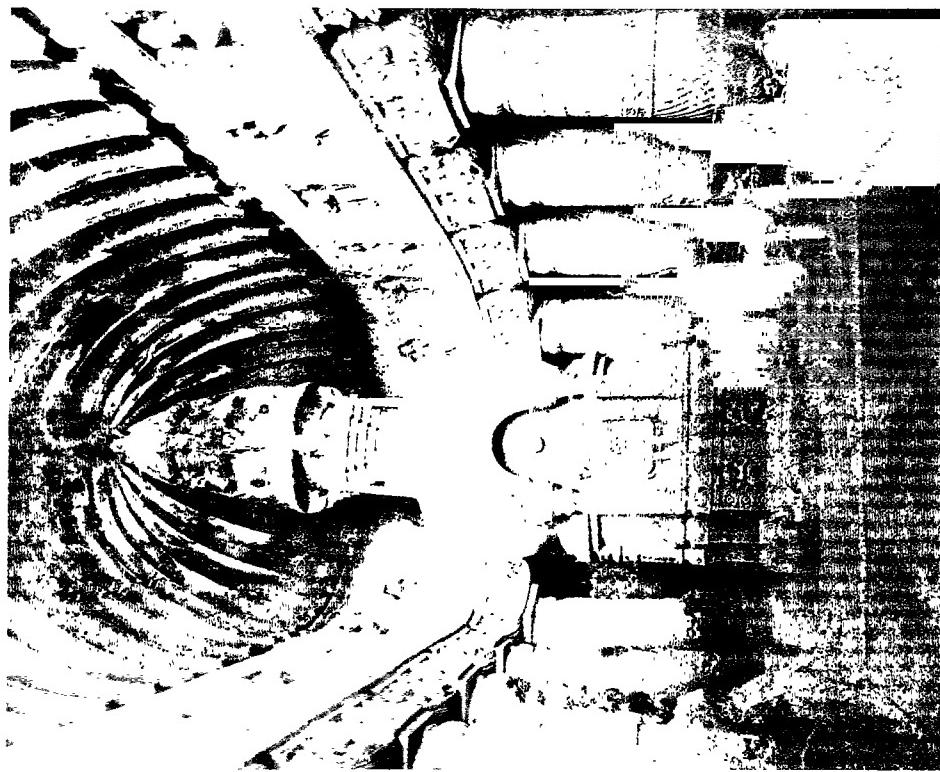
34. Pillar of Old Temple, Rajputana [4th Cent.



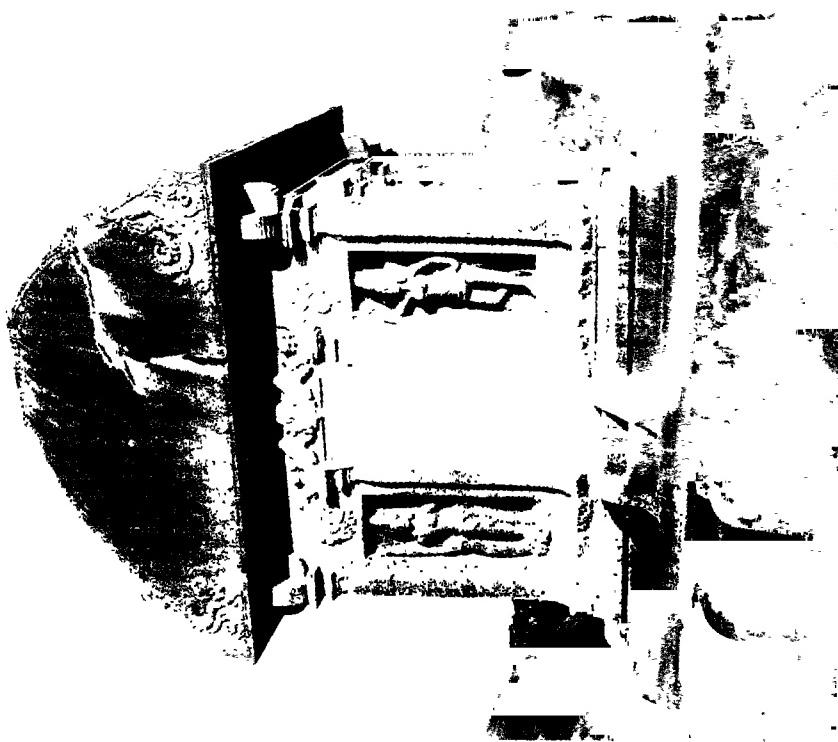
35. Dharmra Raja Ratha, Seven Pagodas, Mahavallipuram, Circa 625-645,
Style of Narasimhavarman.



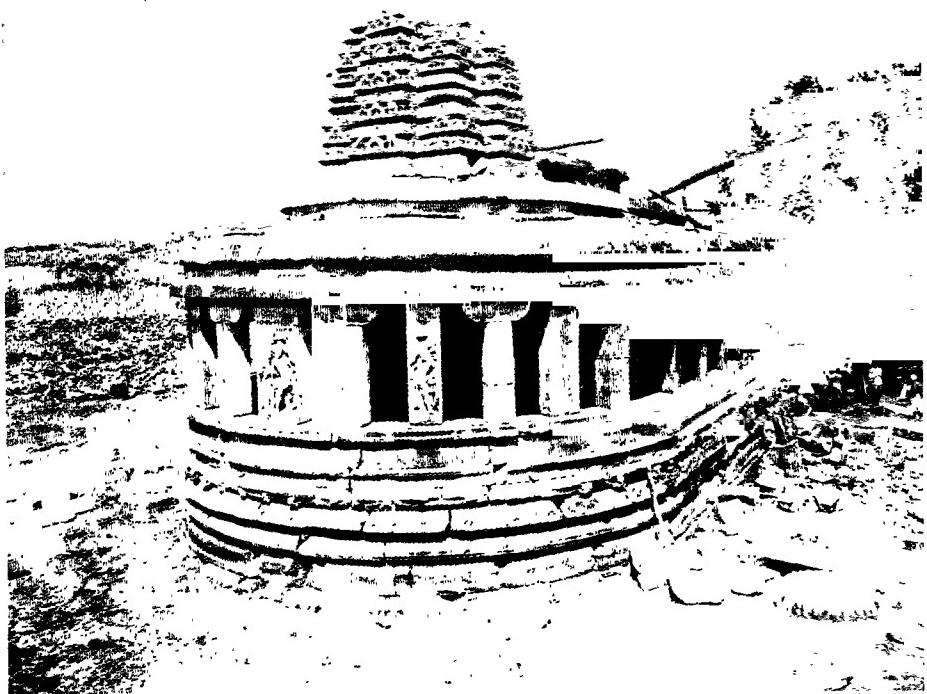
36. Sahadeva's Ratha, Seven Pagodas, Mahavallipuram,
Circa 625-650.



38. Interior of Chaitya Hall, Cave 19, Ajanta, 6th Century A. D.



37. Draupadi's Ratha, Seven Pagodas, Mahabalipuram.



39. Old Apsidal Temple, Aihole, 6th Century.

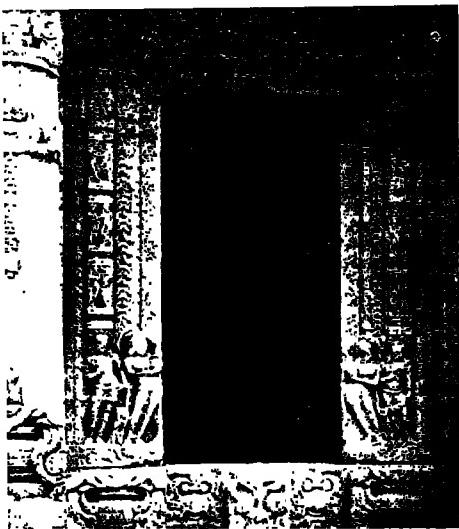
Though the Brahminical form of worship has now been proved to have been in existence beginning of the Christian era, no temples dedicated to the worship of Shiva or Vishnu appear to have survived before 400 A.D. Remains of some Brahminical temples dating about 350-250 B.C. dedicated to Samkarsana and Vasudeva have been discovered at Nagari (ancient city of Madhyamika), near Chitor. The shrines, though enclosed by a stone wall, appear to have been wooden structures. Certain types of buildings, perhaps temples, in the form of Mandapa or dome pavilions with long pillars are represented on the Uduumba coins from Pathan Kot and Kangra dating about the 1st century B.C. On a coin of Huvishka (about 1st century A.D.) a shrine in the form of a domed pavilion with a double ornamental plinth appears to represent the images of Sikanda, Vishakha and Mahasena. But the most tangible example of the earliest form of the Hindu temple is the flat rectangular shrine (40) at Sanchi, dating about 400 A.D. It is very primitive in shape, a translation in structural form of the rock-cut cave-temples of the Buddhist period. The porch in front is faced with four thick pillars elaborately carved with animal capitals. Here we have for the first

time the nucleus of a Hindu temple viz., a cubicle cell (garva griha) with one entrance and the porch (mandapa). In similar flat-roofed temples, of the Gupta period, Sāiva images and images of Vishnu appear to have been worshipped at Tigowa, Central Provinces (54). Other examples of flat-roofed temples of the same period occur at Bhumara in the Nagodh State, and at Nachna Kotari, in Ajaigarh, Bundelkhand, and an interesting example in the Deccan, known as the Lad khan's temple at Aihole, in the Bijapur District, dating about 450 A.D. The flat-roofed Gupta temples are marked by a special feature in the form of their carved entrances (dvara) to the Garva Griha; some of them are exquisitely ornamented with bands (sakha) of relief figures and scroll ornaments of which two examples may be studied, in progressive developments, one from an early Gupta temple at Nachna (41), and the other from a late Gupta temple (42). A special motif of the decoration is the row of Mithunas or sexual couples, which according to a text of the Silpasastras 'should form the ornamentation of the last band' ('mithunair sakha-sesam vibhusayet').*



40. Gupta Temple, Sanchi, Early 5th Century.

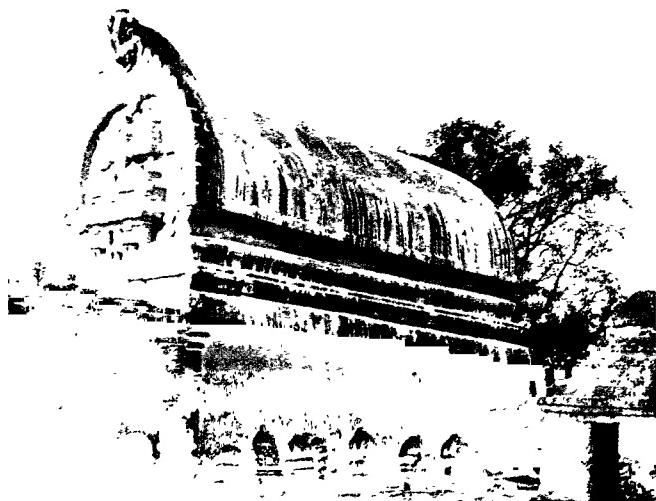
*The subject is very elaborately dealt with in an article published in Rupam, No. 22-23, 1925, entitled 'The Mithunas in Indian Art.' By O C Gangoly



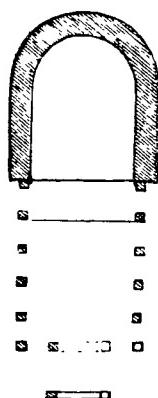
41. Door of Shrine, Nachna, Early Gupta.



42. Door of Gupta Temple, Late Gupta



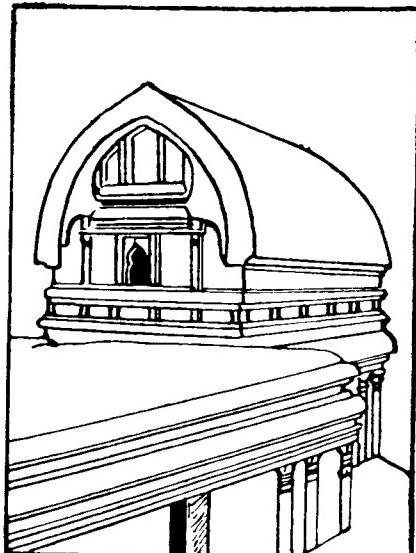
43. Kapotesvara Temple, Chezrala, Circa, 4th Cent



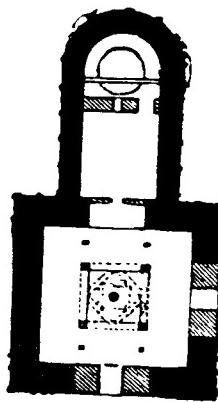
44. Plan of Chaitya Hall,
Sanchi, (Fergusson)



45. Vadamallisvara Temple, Oragadam, Circa 10th Century.



46 Ancient Buddhist Chaitya at Ter, Hyderabad (Cousens).



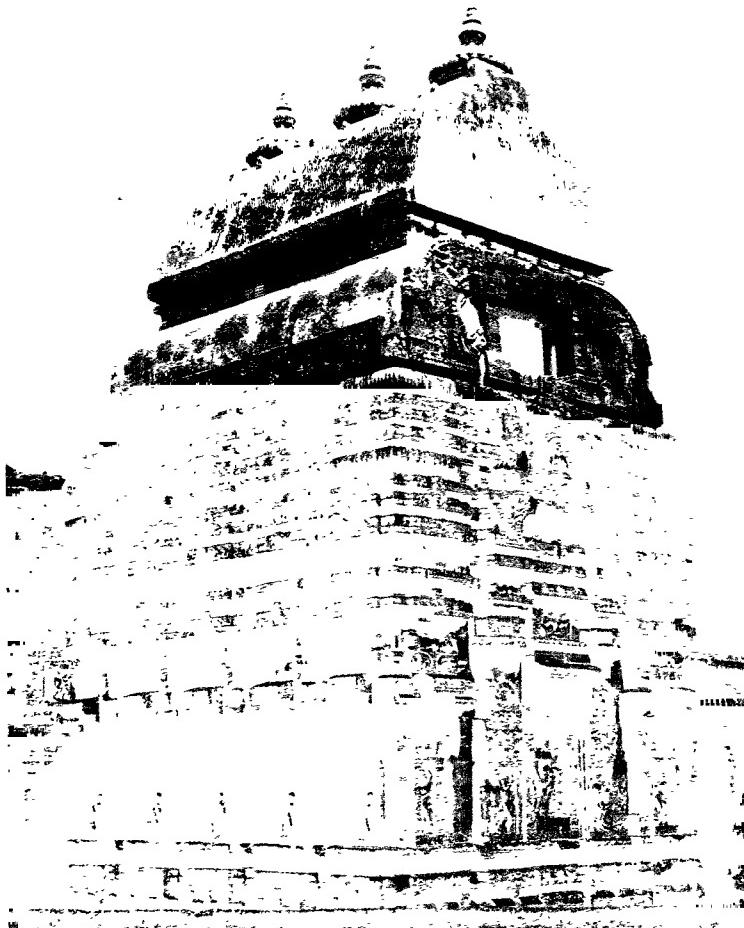
47 Plan of Ancient Buddhist Chaitya at Ter (Cousens).

It is at Aihole, (Bijapur District), the mysterious breeding ground of early Hindu temples, that we, for the first time, perhaps, come across a temple with a tower which had also a Sikhara. This is the Hucchimalligudi temple dating about the 6th century. But in the meantime, a structural temple of a novel shape had reared its head. It is the Kapotesvara temple at Chezarla (43), in the Kistna district. Its peculiar feature is the barrel roof (*kubja prish*), also round at the rear end, terminating at the entrance in a gable-end Chaitya-window structure, having its earliest prototype in Southern India, in Sahadeva's Ratha at the Seven Pagodas. This form is practically repeated in an elaborate version in a much later shrine (datable between the 8th and the 11th century) being the Vadamallisvara Temple at Oragadam, Chingleput District (45).

These structural Chaitya temples are evidently derived from the earliest ancestor of which remains have survived of a temple at Sanchi (44).

By the 6th century three distinctive types of structural temples had been evolved, which have called for three distinct names in the Silpa Sastras, viz., Nagara,* Dravida, and Vesara. Each of the first two carries the Sikharā—the tower over the Garva-griha—the cell containing the image, while the Vesara has a barrel roof. The Vesara is evidently derived from the rock-cut

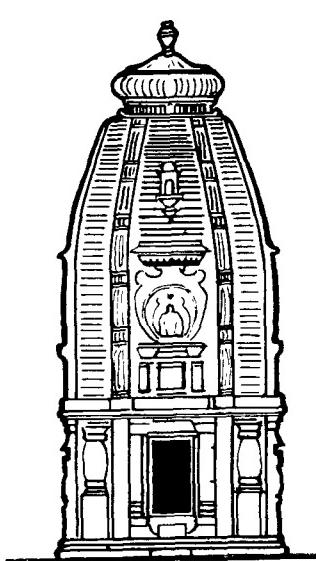
cave temples of the Buddhist period. An early structural Vesara temple evidently dating from the Buddhist period (but now appropriated to Vaisnava worship) has been discovered at Ter, in Naldurg district of Hyderabad. The oblong Mandapa in front may have been a later addition (46 and 47). It does not appear to have long been in fashion. There are two examples at Mahavalipuram (Seven Pagodas) (36 and 28). The Vaitala Deul at Bhuvaneswara (48) appears to be a modified example of the same class. But it



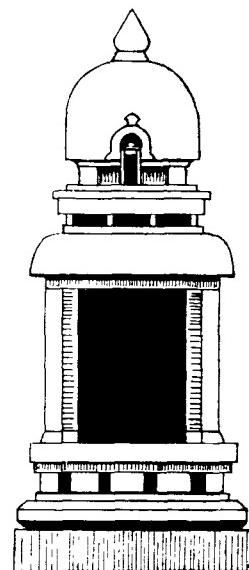
48 Vaitala Deul, Bhuvaneswara, Orissa, Circa 1000
A. D.

*This type corresponds to the old classification of 'Indo-Aryan' of Fergusson. The term 'sikhara temple' for this type is not a happy definition, for the Southern Dravidian temples have also Sikharas (towers), though the form of Dravidian Sikharas is quite different.

appears afterwards to have been dropped out of practice. The Nagara type is distinguished by its curvilinear Sikhara, ending with a Kalasa (auspicious jar) with some pointed emblems as finial or spire (sriuga). This type better known as the Northern or the Indo-Aryan type, has reigned almost supreme in the greater part of Northern India. How it was evolved is still a matter of controversy. But it appears in a somewhat undeveloped form at Pattadakal side by side with a Dravidian temple, about the 7th century. The characteristic of the Northern Sikhara (Nagara) temple is its curvilinear tower (sukanasa sikhara), and its peculiar finial of ribbed Amalaka (emblic-myrobalan) which caps the tower and carries the Kalasa. The Dravida type has for its finial a conical cap technically called a Stupika, (a miniature mound) (49 and 50). According to Mr. Havell, the Indo-Aryan Sikhara temple was the type of Vishnu temple, and the Dravida form, the type of Shiva temple. The latter has prevailed in the South, the stronghold of Saivism, while the spired Nagara temple has flourished in the North, the chief theatre of Vaisnavism. Mr. Havell believes that the two forms had existed side by side at Nineveh, and he cites the famous Naram-sin stele in the British Museum in support of his contention. (51).



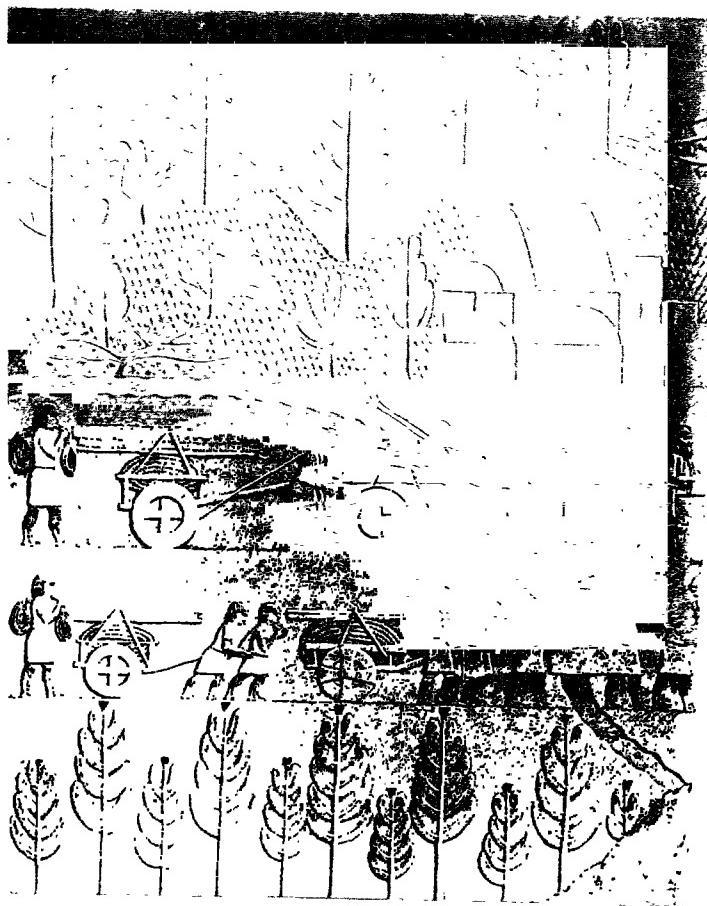
49. Dravida Sikhara Temple



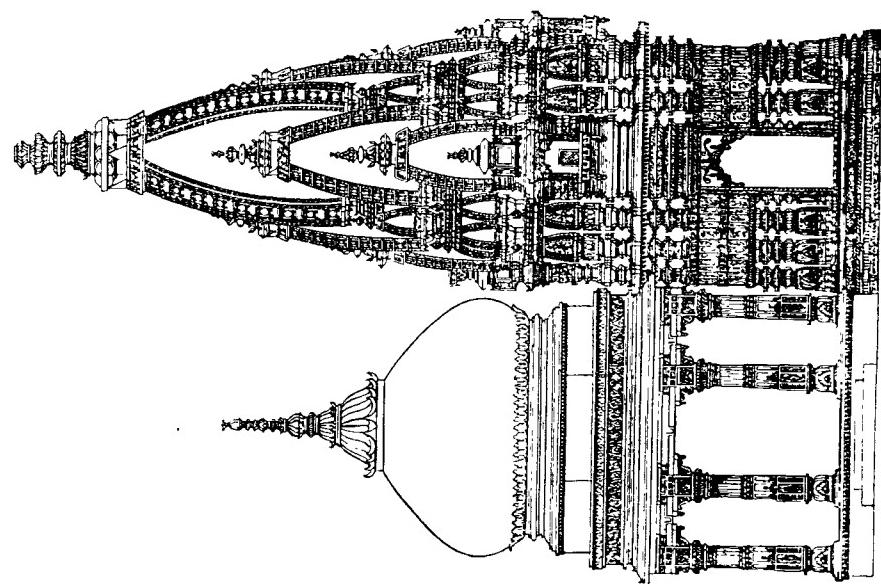
50. Dravida Nagara Sikhara Temple

The Indian temple, in its essential form, whether in the North or in the South, consists of the Garva Griha (cell) which contains the image of the presiding deity and which is a cubicle cell mounted by a tower (sikhara) with the porch (mandapa) in front, very typically represented in the diagram of the Temple of Visveswara at Benares (52). Sometimes the perambulating path (pradaksina patha) round the temple is covered by a narrow passage of sloping roof called an Ardhā mandapa (as in some of the old temples at Pattadakal and Aihole, vide 53). The Indian temple in its essential, though primitive, form is best studied in the early Gupta temple at Sanchi (54) a cell with a porch in front, the Grava Griha with the Mandapa, the typical temple in its simplest form. In some of the Southern temples a small intervening room is added

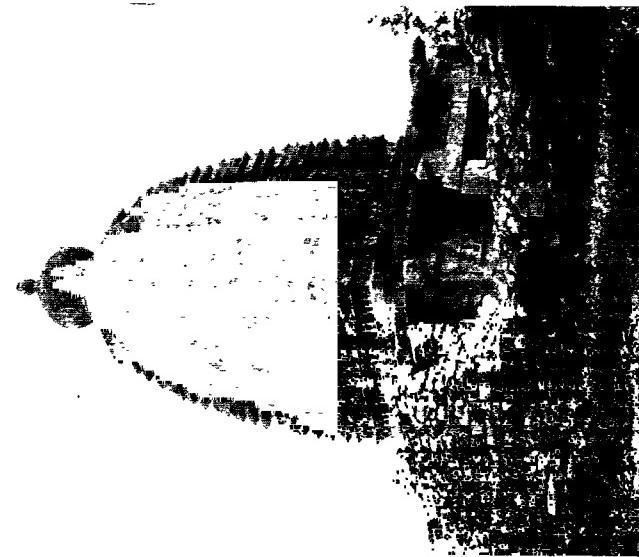
between the cell and the porch called the anatarala. The memory of the flat-roofed Gupta temples is perhaps preserved in the form of a minor shrine of Nandi (Nandi-mandapam) in the courtyard of the Virupaksh temple at Pattadakal (740, A.D.), where the flat-roof has a small chuda or pinnacle at the centre (55).



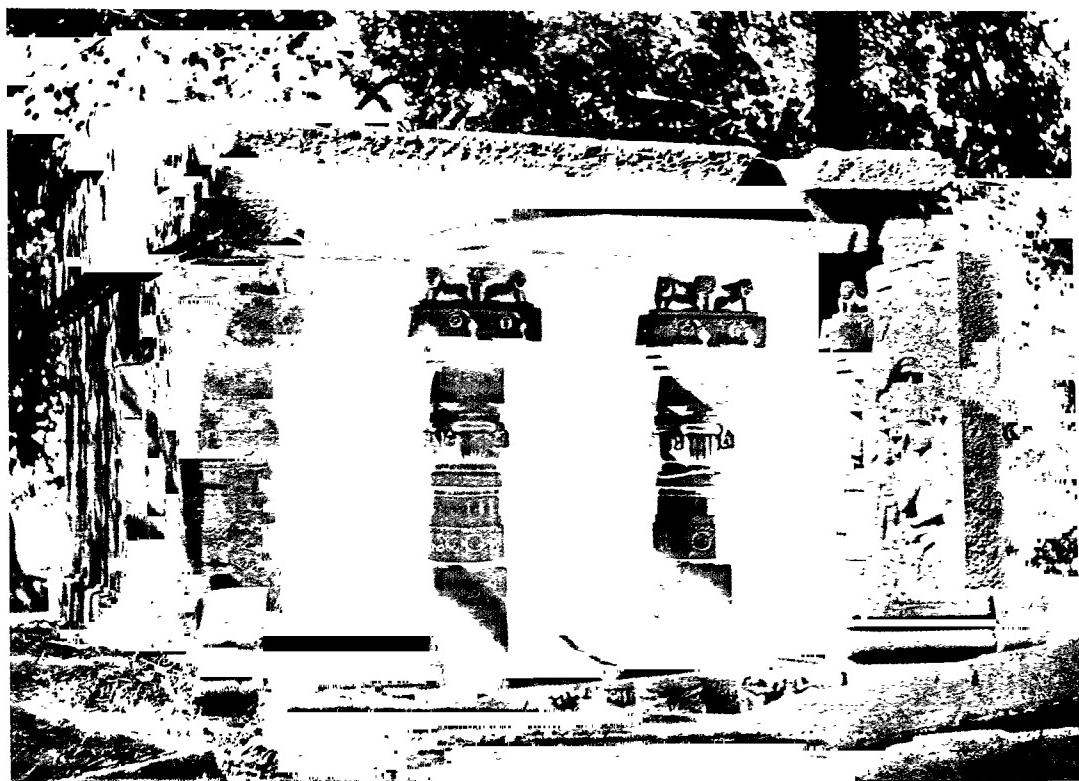
51 Naram Sin Stele, Nineveh,
(British Museum)



52. Temple of Visweswara, Benares, (Prinsep).



53. Old Sikharas, Pattadakal, Late 7th Century.

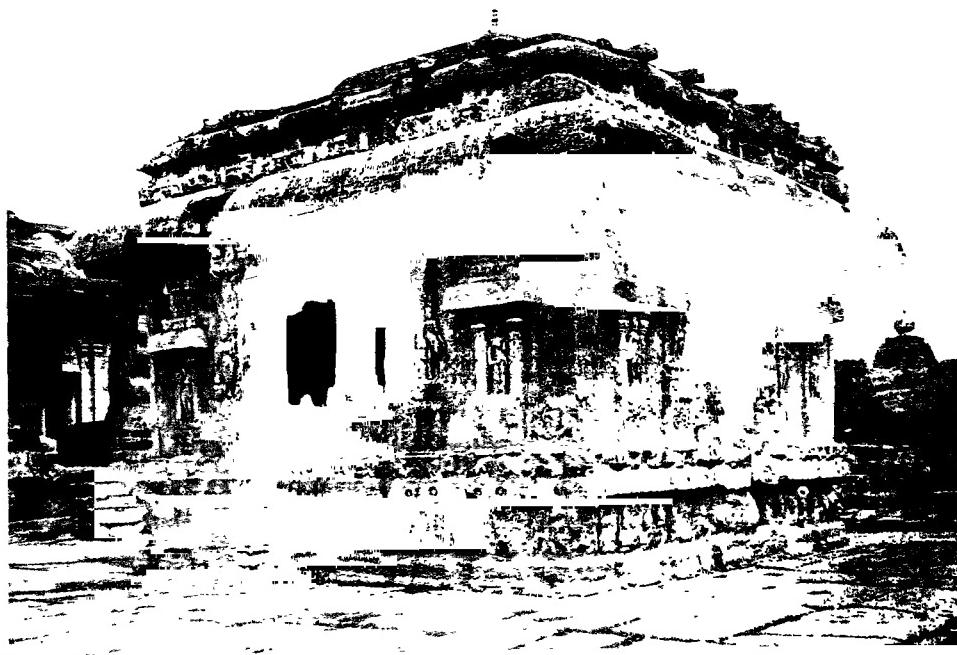


54 Gupta Temple, Tigowa, near Jubbulpore, 6th Century.

The most typical and elaborate examples of the Nagara temple occur in the famous group of shrines at Bhuvaneswara, Konarak and Puri in Orissa. There are as many as 35 important temples, with numerous replicas in miniature, covering a period between the 8th and the 13th century, the most important group being at Bhuvaneswara. The earliest* in date is, perhaps, the Parasurameswara temple, dating about 750 A.D. and the latest in date, the Sun temple at Konarak dated about the 13th century (vide diagram of Plan and Section in 56). Between them comes the Great Lingaraja temple at Bhuvaneswara, datable about 1000 A.D. The last named temple, perhaps, represents the local Orissan type in its characteristic feature with its aggressive development of the Amalaka sila and the almost parallel lines of the tower. In the earlier forms in Orissa, (e.g. Parasurameswar) the tower (vimana) is somewhat dwarf and conical. The Mandapa or porch in front of the tower is called in Orissa a Jagamohana ('Tempter of the World'). In some of the Orissan temples the jagamohana is preceded by a Nritya mandapa (dance hall)

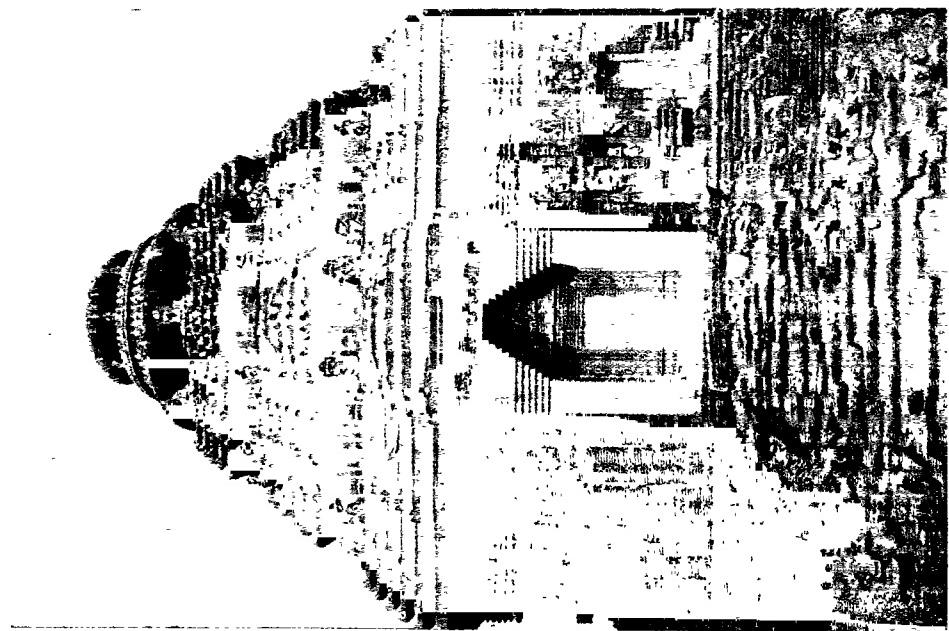
*It is now believed, mainly on the basis of style, that Satrughneswara is the earliest surviving temple in Orissa.

Sabha mandapa (assembly hall) or Bhoga mandapa (dinner hall) adding a succession of ancillary halls in front of the main shrine as illustrated in the plan of the Lingaraja temple at Bhuvaneswara (58). A typical Jagamohana is best illustrated in the surviving example in the temple of the "Black Pagoda" (57). The Nagara type has been profusely used in building temples in Rajputana. An early phase of the type in Rajputana is best illustrated in the Sun Temple at Osia near Jodhpur, of late 9th century (59). It has the cap of Amalaka and an open Mandapa in front supported on a row of pillars, which distinguish it from the Orissan types. The next important group of Nagara temples occurs in some very well developed forms at Khajuraho in the Chatrapatra state, the old Chandela capital of Bundelkhand. They were erected between 950-1050 A.D. and are almost contemporary with the Orissan group. The finest of the Khajuraho group is the Kandarya Mahadeva temple, 116 feet in height. The magnificent effect of most of these temples of the Khajuraho group is due to a clever emphasizing of the vertical lines by the repetitions of the replicas of the 'tower-forms' round the principal tower (vimana). The effect is of a clustered arrangement of Vimanas. An innovation is provided by shaded balcony windows. The elaborate floral and figure sculptures add great distinction to the facades. In Gwalior, and in various other places of Rajputana and Western India, Nagara temples with local variations are plentiful. In the

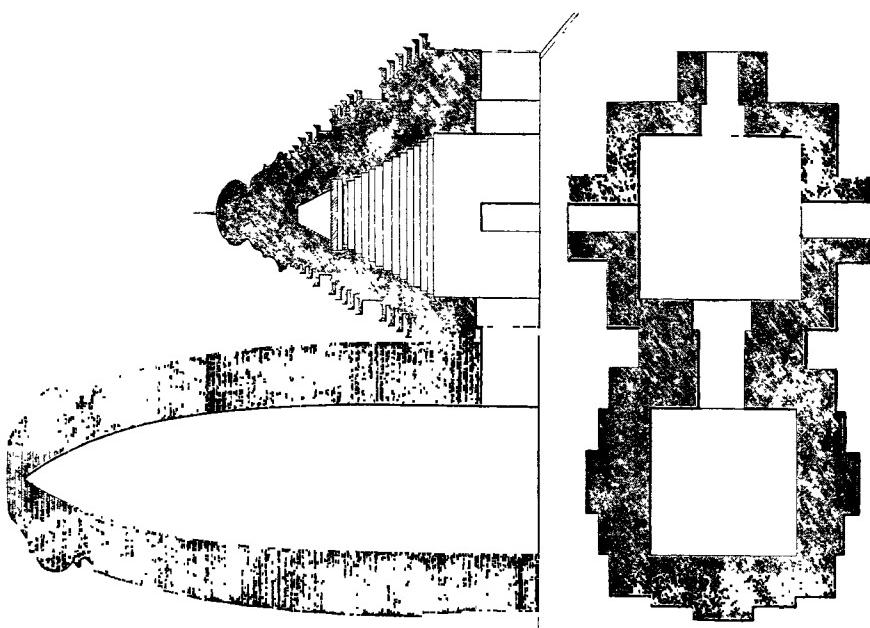


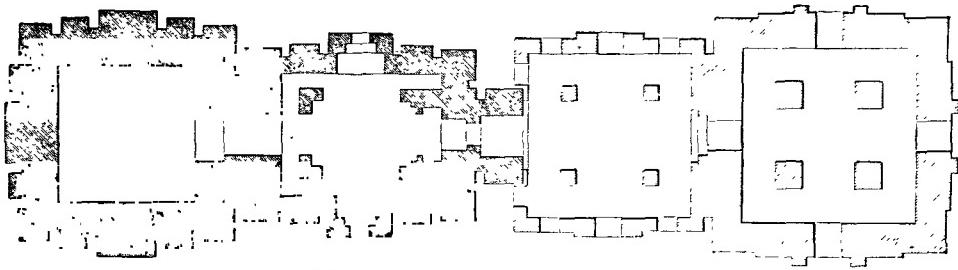
55 Nandi Mandapam, Virupaksha Temple, Pattadakal, 740 A. D

58. Jagamohana, Konarak Temple, Orissa 1238-64 A.D.



57. Plan and Section of the Temple at Konarak, Orissa
(Persson)

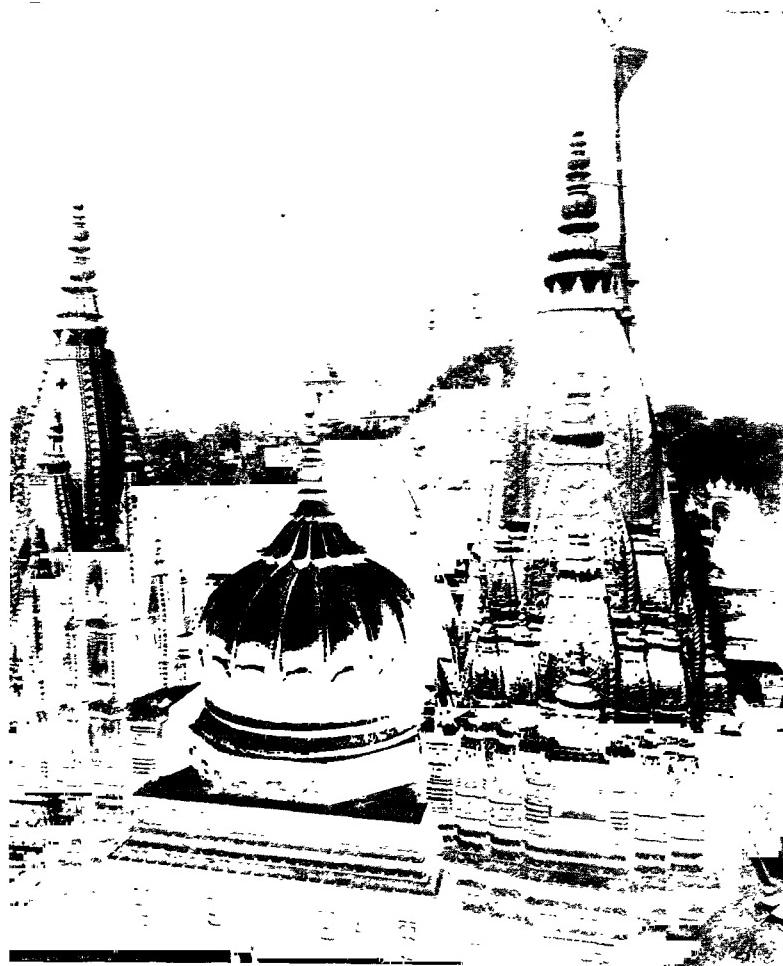




58. Plan of Lingaraja Temple, Bhuvaneswara, Orissa
(Mitra)

59. Temple of the Sun, Osia, Jodhpur, Late 9th Century A.D.

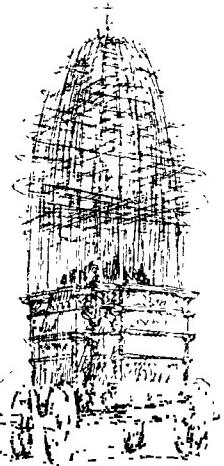




60 Temple of Visvesvara, Benares, Early 18th Century

A very instructive illustration of the history of the form is furnished by the "ultimate form" the Orissan type took in the Temple of Scindia's Mother at Gwalior (19th century), (62). The curvilinear form has strengthened into a simple conical pyramid, with the towers reduplicated in miniature forms; a variation is introduced by the use of a Rajput dome. The application of the Nagara type in the Jaina temple cities, is variegated by the use of domes, of which the pleasant semi-circular silhouettes offer very pleasing contrasts.

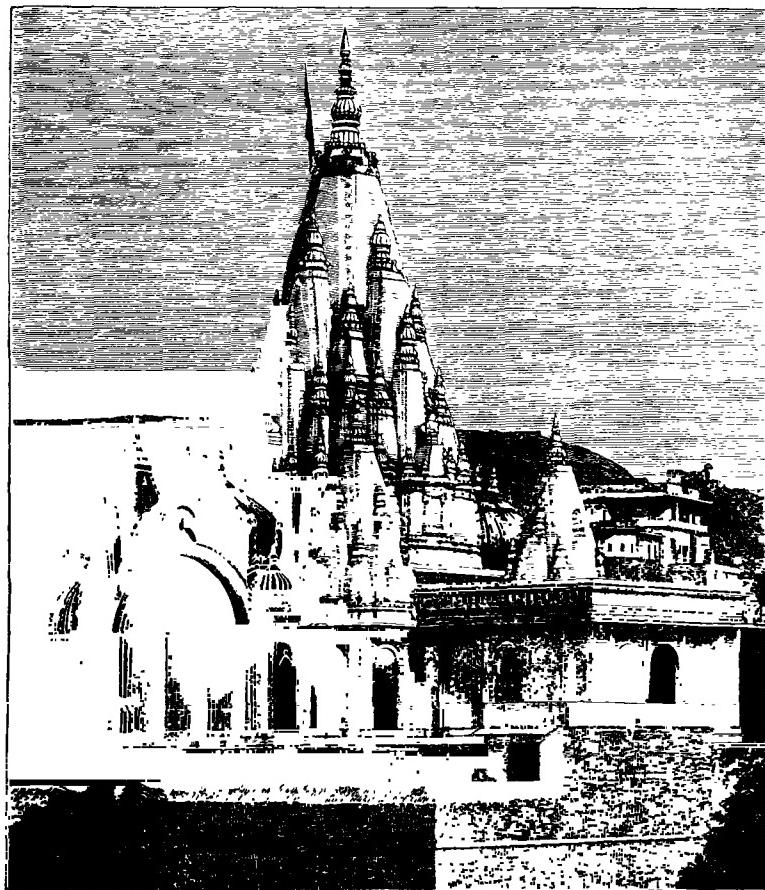
Punjab Himalayas similar types but in simpler forms occur at Masrur, Kangra and Baijnath. The later developments of the type are best studied in the numerous examples at Benares. The most typical is the Visvesvara temple, rebuilt, on an earlier foundation, in the early part of the 18th century (60). That the form has not lost its possibilities is proved by numerous uses and adaptations of the form, in the group of Jaina temples at Satrunjaya and Palitana (Gujarat).



A very interesting controversy* has raged amongst scholars as to the origin of the peculiar form of the curvilinear Sikhara of the Nagara type of Northern India. According to Simpson, the form is derived from the dome or conical hut of archaic type still used by the Todas of Southern India or, in the alternative, copied from the old bamboo processional car (61). A third view, propounded by Professor A. A. Macdonell of Oxford is that the Sikhara is derived from the Stupa or the Chaitya. A fourth solution to the riddle has been recently suggested by Rai Bahadur Rama Prosad Chanda. According to him the curvilinear Sikhara is the descendant of the archaic

61 Bamboo Processional Car (Simpson).

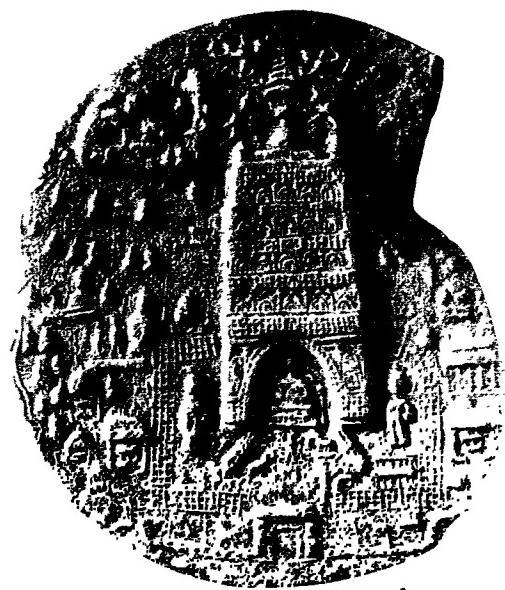
62. Temple of Scindia's Mother at Gwalior.
(Fergusson)



*The matter is very fully discussed by Mr. G D Sarkar in his learned paper "Notes on the History of the Sikhara Temples". (Rupam, No 10, April 1922)



63. Mahabodhi Temple, Bodh Gaya.



64. Terra Cotta Plaque, Kurukshetra, Bihar.



65. Papanatha Temple, Pattadakal, Circa 735 A.D.

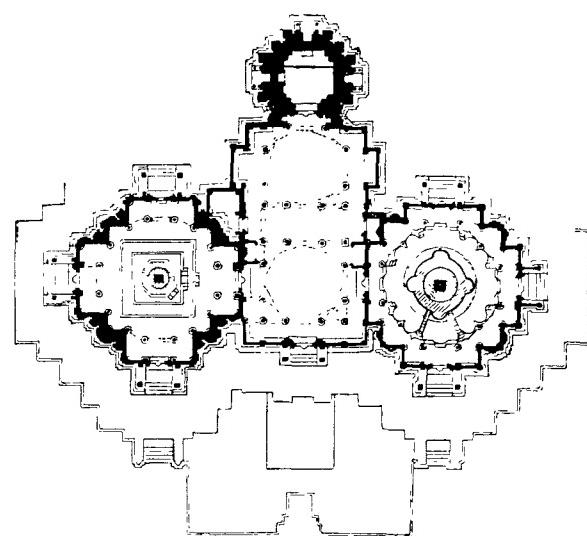


66. Parasurameswar Temple, Bhuvanesvara, Orissa, 750 A.D.

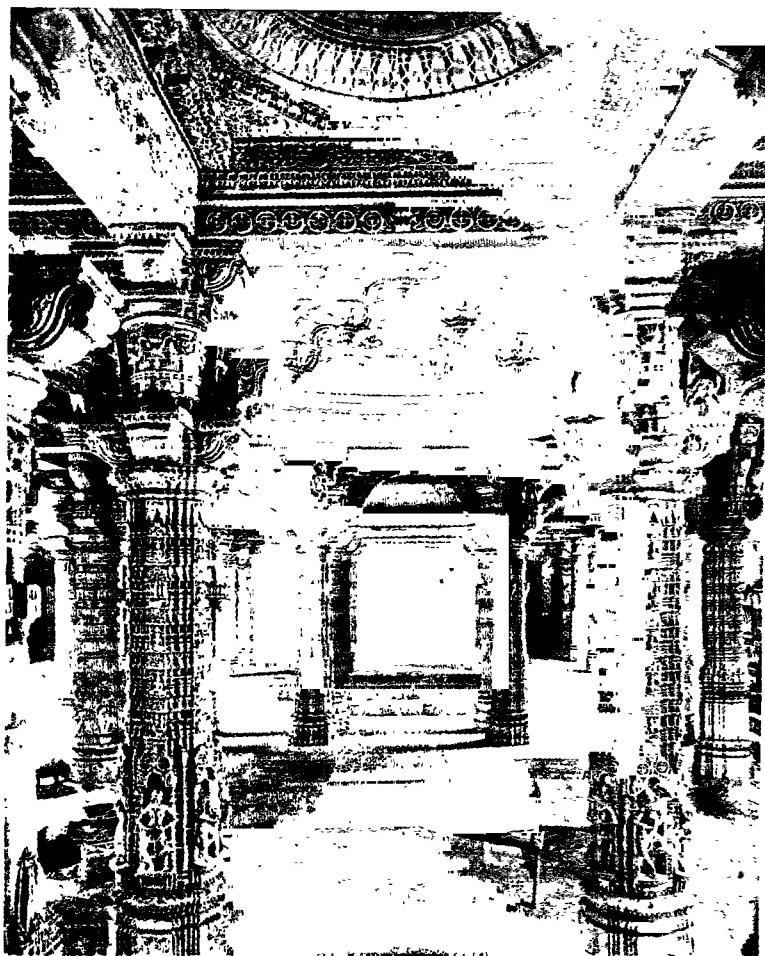
Kutagara frequently represented on the bas-reliefs from Bharhut (9 and 10). The Sîkhara temple in its archaic form is perhaps represented in the Mahabodhi Temple at Gaya with a central conical tower, flanked by four minor towers at the corners of which a replica has been sought to be identified in a very old terra cotta plaque, dug up at an old site at Kurkîhara (Behar), evidently a Buddhist votive tablet. Before the full fledged Nagara Sîkhara temple evolved in the group at Orissa, it must have had an earlier history, and its archaic form may be traced in some of the old temples at Pattadakal, one of which (65) is a close parallel to the Parasuramesvara at Bhuvanesvara (66). An early Nagara and an early Dravida form occur side by side in a group at Pattadakal (67). A new type of temple in Rajputana developed important features typically represented by the famous Jaina temples at Mount Abu of which the most important are those of Vimala Shah (c. 1032 A.D.) and of Tejapala (1232 A.D.), (69, 71). Their outstanding peculiarities are large circular Mandapas (porches) supported by richly carved columns joined by strut brackets, covered by still more richly carved ceilings with central pendants.



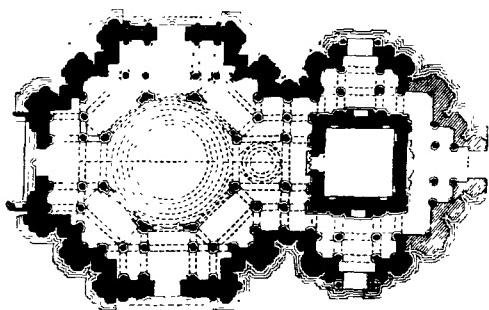
67. *Nagara & Dravida Sikhara Temple, Pattadakal, Late 7th Century.*



68. *Plan of Temple of Vastupala, Girnar
(Burgess).*



69. Interior, Tejpal Temple
Mount Abu, Circa 1232 A.D.

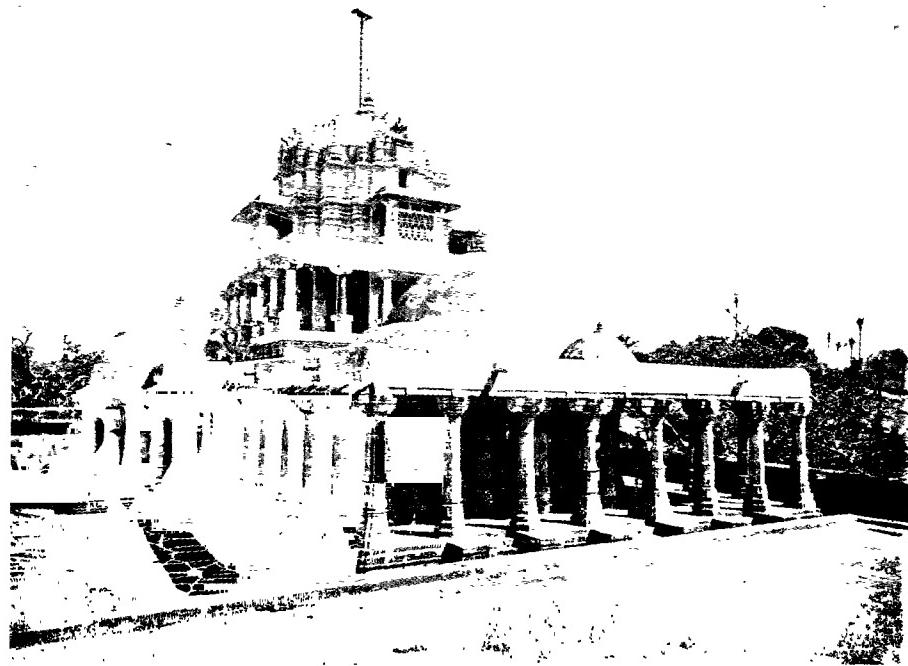


70. Plan of Temple at Somnath (Burgess).

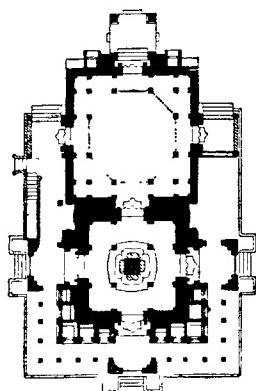


71 Ceiling of Tejpal Temple, Mount Abu.

It is the peculiar development of the columns which lend to these Jaina temples of Rajputana a peculiar character. Another peculiar feature of this type of Jaina temples is a collonaded group of minor shrines spread over the four sides of the courtyard at the centre of which stands the main shrine, vide Plan of Temple of Vastupala, (68). Probably the famous temple of Somnath, destroyed by Mahmud about 1000 A.D. was in the same style (70). A novel feature of these temples is the Rajput dome which must be distinguished from the Moghul domes. An interesting development is the Chaumukha or the four-faced form of temples chiefly used for the four-faced Jaina images—each image being seen from each of the cardinal points (72).

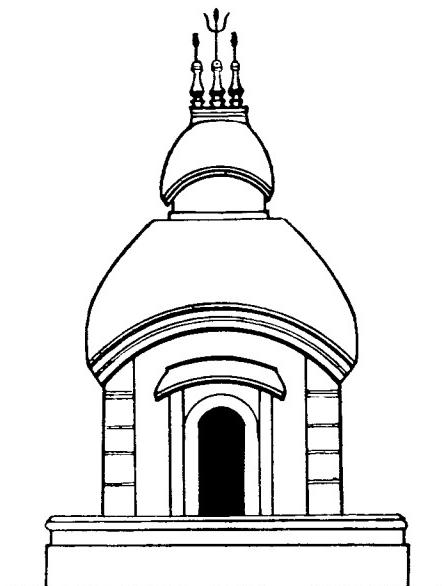


72. Chaumukha Temple, Mt. Abu, 13th-14th Century.



Plan of Chaumukha Temple

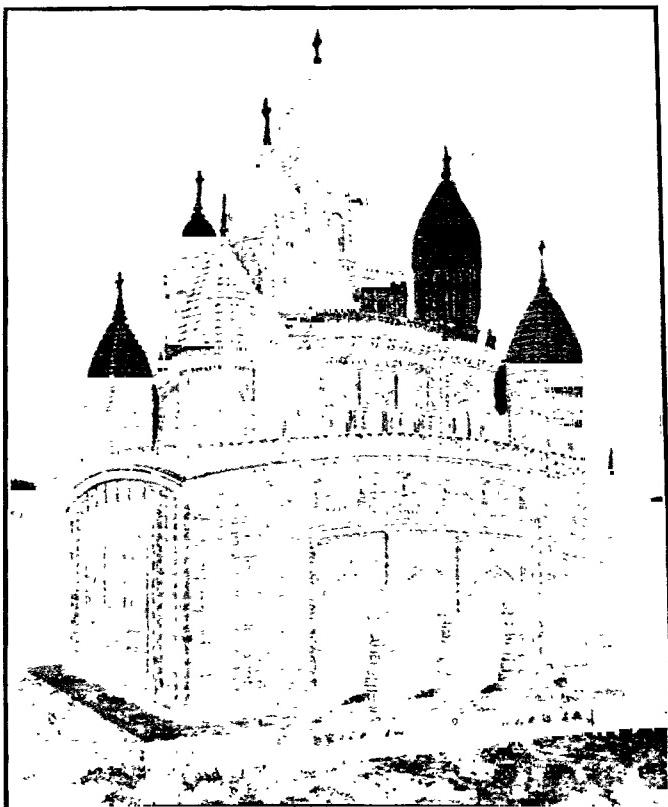
73. Type of 'leaf hut',
Shiva Temple, Bengal.



Bengal with its old traditions of wood and bamboo architecture offers some new forms in their Chandi mandapas (lit., porch of goddess Chandi) and temples with curvilinear roofs, evidently derived from bamboo forms. A very characteristic form, used generally for temples of Shiva (Shivalaya) (73) has a sloped cover, truncated at the top, which is mounted by another miniature tower, evidently borrowed from 'leaf-huts' very common in Bengal. Another typical form is illustrated in the temple at Kantanagar (17 miles from Dinajpur Station) (dated 1704-1722) designed in the form of wooden Raths arranged in tiers of bent cornice, mounted at corners with miniature curvilinear towers (74). The type is repeated in the well-known temple at Daksineswara, the shrine of Ramakrishna near Calcutta. Very interesting variations of the type of 'leaf hut' temples of Bengal are furnished by the Char-Bangla Temple at Barnagar, near Murshidabad (75) and the temple at Kusumakhola in

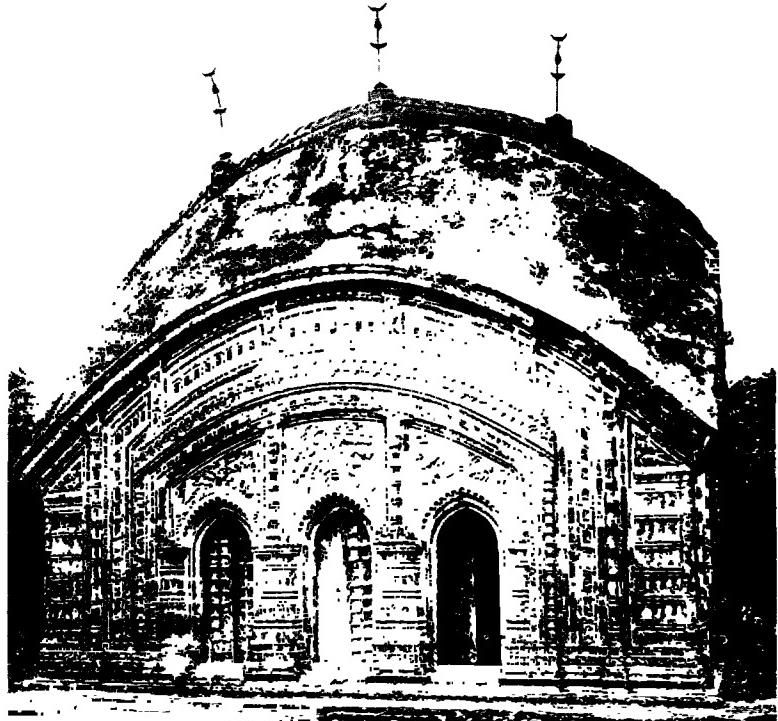
the same district. The temple of Rani Bhavani (77), (dated 1675 saka,) is an elaborate development of the type illustrated in (73). In old Gauda, a tri-foiled arch has been a peculiar feature with affinities with Orissan parallels. The characteristic tri-foiled arch supported by characteristic pillars frequently occurs as architectural backgrounds in stone sculptures of the Pala period (9th-12th century.) The shrines of the Himalayas, chiefly of wood, offer interesting developments. But the most peculiar forms appear in the temples of Nepal. Variations of the Nagara type and of the Bengal types occur side by side with local models. Of this the most charac-

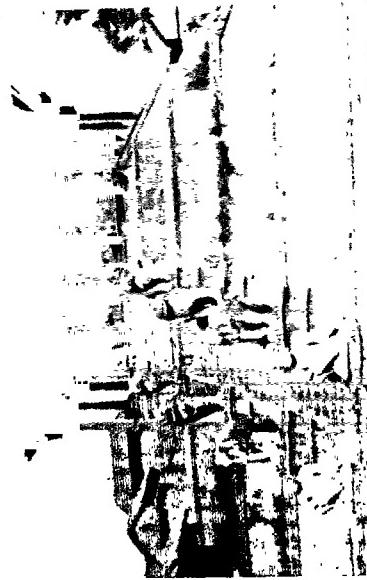
74. Kantanagar Temple, Dinajpur, Bengal
1704-1722 A.D.



teristic are the storied wooden temples with sloping roofs, very near in design to the Chinese pagodas (76). The sloping roofs are supported at each stage by carved brackets, the four ends being furnished with 'up-turned noses' which are a peculiar feature of the Far Eastern temple architecture. These Nepalese types have affinities in Cochin and Travancore and, also, in cognate thatched temples at Bali. The Kosthakar type is an obvious development of Nepalese Chaityas. The Radhakrishna temple at Khatmundu (78) is a variation of the Radha temples of Bengal, the tower (sikhara) being an adaptation of the Orissan Nagara type. In the Punjab Himalayas, specially at Kangra, numerous Sikhara temples of the Nagara type in its simplest form have survived.

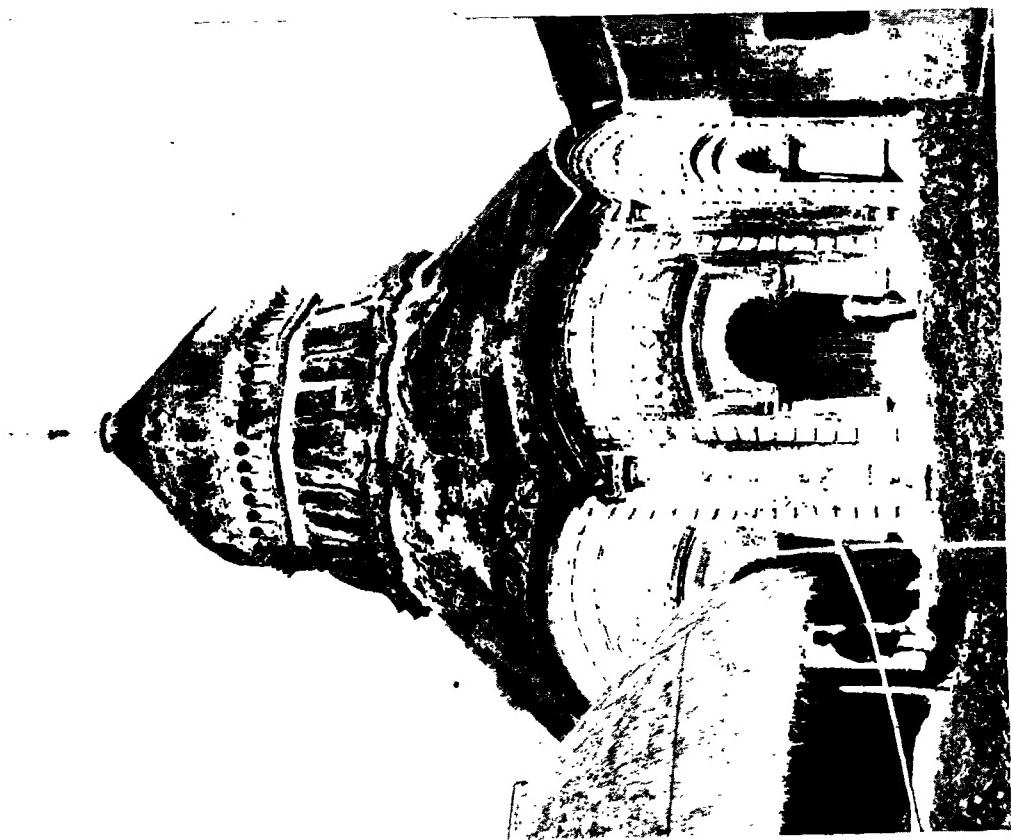
75. Char-Bangla Temple,
Bad Nagar, Murshidabad,
1755 A. D.





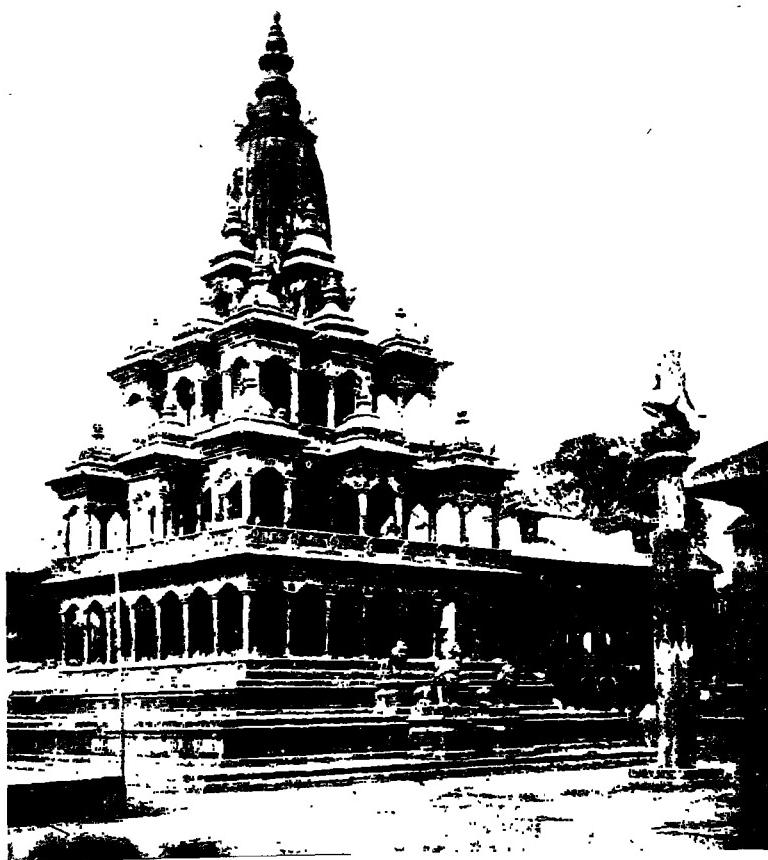
76. Temple, Devi Bhavani Bhagao, Nepal, Dated
1703 A. D.

77. Temple of Rani Bhavani, Murshidabad.



In Southern India, (dakshinapatha), the theatre of Tamil civilization, there has reigned a peculiar school of architecture, specially associated with the Tamil races and their culture, hence designated as Dravidian, the term being derived from the word Tamil (Damil). The history of this school can be very clearly traced by the succession of definitely datable monuments spread over all parts of the peninsula south of the Godavari, beginning from about the 6th century up to the present day, for the old devout royal builders have in the Nattacotta Chetties of to-day, (a guild of enterprising merchants), worthy successors, and temple building is still a pious act of merit.

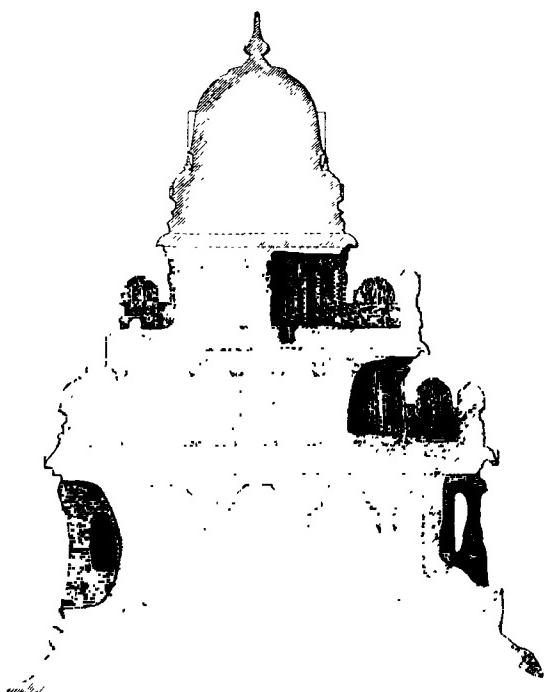
78. Radhakrishna Temple,
Nepal, Circa 18th Century.



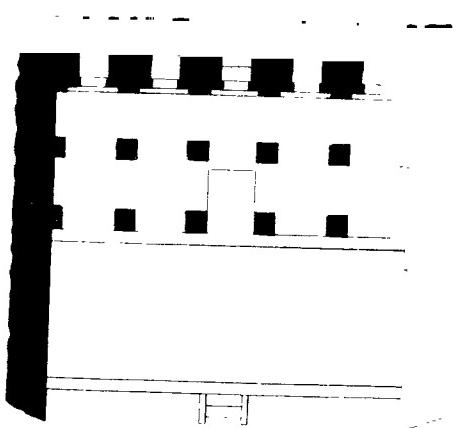
As in the North, structural temples are preceded by rock-cut shrines and caves, of which the earliest forms are furnished by a primitive type of rock-hewn caves with simple stone beds, some of which carry Brahmi inscriptions and are supposed to have been excavated for Jaina monks and are popularly known as 'the beds of the-Pandavas.' Next, in order of time, comes the series of early Saiva caves, known as the Orrukal Mandapas or 'one stone shrines,' attributed to the princes of the Pallava dynasty—derived from a race of great martial energy. They carved a kingdom in the Vengi country, from the declining Andhras, and were in constant conflict with the Chalukyas of Badami, and with the Cholas and Pandyas of the Coromondal coast. The Pallavas appear to have been the first builders in stone in Southern India, for earlier forms of architecture must have been in wood, or mud, a fact definitely suggested in a Pallava inscription in a cave at Mandagappatter which states that 'this temple is caused to be constructed by Vichitrachitta (Mahendra Varman) to enshrine the images of Brahma, Shiva and Vishnu, without the use of bricks, timber, metal or mortars.'

It is possible that the Pallavas transplanted this style of cave architecture to the South from the Andhra country, and possibly had for their models rock-cut shrines like those at Undavalli near Bezwada. This seems to bring Southern style in contact with the earlier Buddhist forms of the North which the Andhras must have practised in the Vengi country. This contact with Northern forms is very well illustrated in the Dharmaraja's Ratha which is a reproduction in stone of a three-storied Buddhist Vihara as will appear from the comparative diagrams (79 and 80). Similarly, the Nakula's and Saha-deva's Rathas, with their peculiar apsidal backs, appear to reproduce in structural form the apsidal Chaitya of the North (compare the plan and section of the Chaitya cave at Karli).

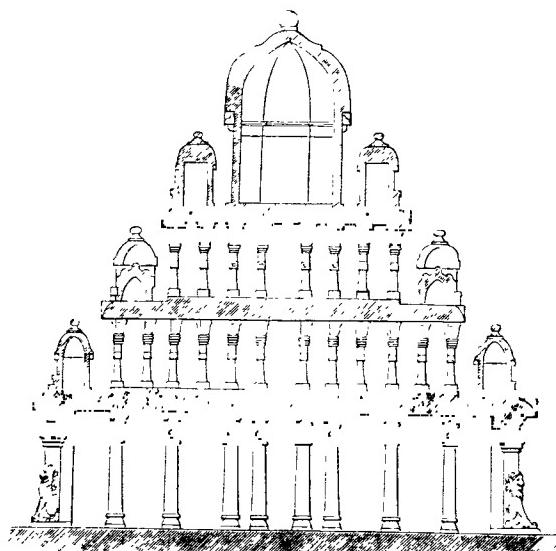
79. Section of Dharmaraja Ratha (Fergusson).



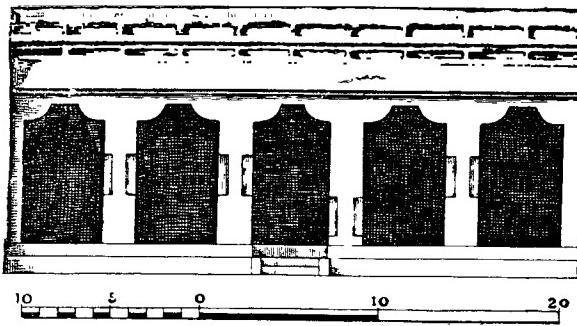
As Fergusson has remarked, 'these rathas represent the petrifications of later forms of Buddhist architecture and of the first forms of the Dravidians. Incidentally, this Ratha, as also the Bhima's Ratha and Ganesha's Ratha, with their peculiar barrel-shaped tops, like the backs of elephants, (Hasti pristha or Kubja pristha) are temples of the Vesara type, of which two interesting examples can be studied in the Kapotesvara temple at Chezarla (C. 4th century A.D.) (43). and Vadamallisvara Temple, Oragadam (C. 9th century) (45). The early rock-cut cave shrines of the Pallavas, in various stages of development, are spread over in numerous examples in the North Arcot and Trichinopoly Districts, e.g. Kilamavilangai, Pallavaram (81), Dalavanur, Mahendravadi Magalarajapuram, Bhairava Konda, Shiyamangalam, Trichinopoly rock-cut shrine, Trimurti cave at Mahavalipuram. Most of these were excavated by King Mahendra Varman I (about 600-625), though one or two may,



I. Plan and elevation of Pallava Temple, Pallavaram, Chengalput. (Longhurst).



80. Diagram of a Buddhist Vihara (Fergusson).



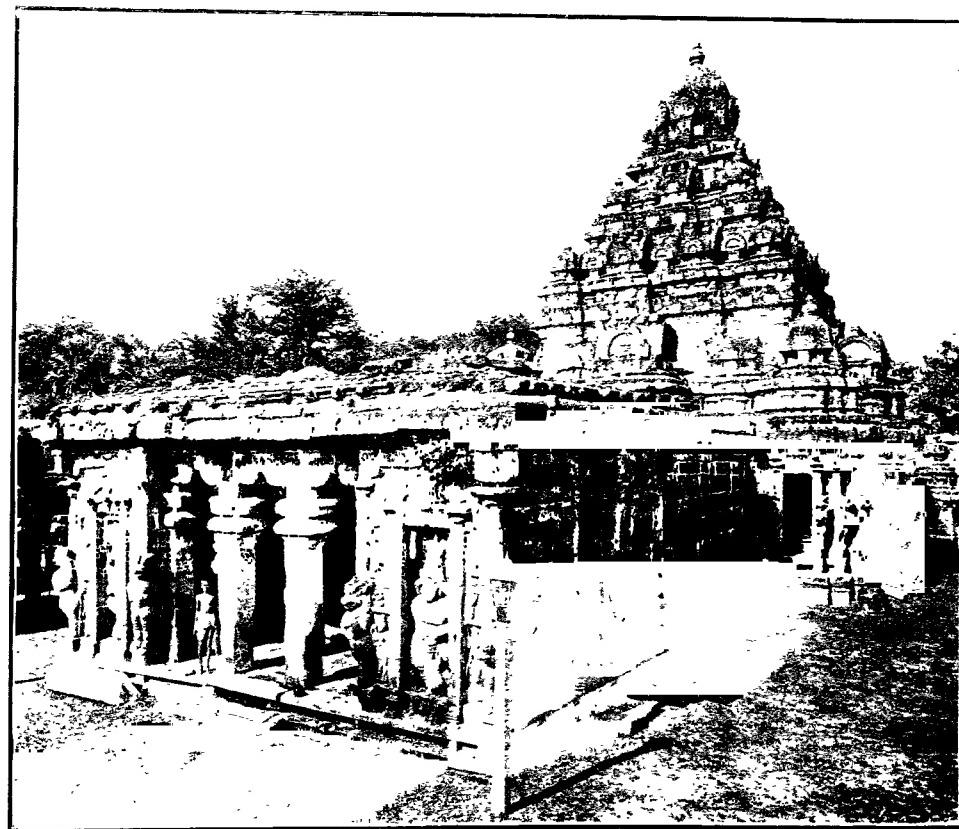
Elevation.

perhaps, be attributed to his father Sinha Vishnu (late 6th century). These Pallava cave shrines, 'in the style of Mahendra,' consisted of a cubicle cell containing the Linga, faced by a porch or verandah, supported by thick square pillars, prismatic at the centre. The porch, later on the cell itself, is flanked by Dwarapalakas in reliefs. Another feature is the simple entablature (prastara) broken by 'Chaitya windows' called Kudus, with human heads. The style of the pillars, Dwara palakas and the Kudus, go through interesting developments, which offer a valuable clue for a chronological stratification, very skilfully utilised by Professor Jouveau-Dubreuil. The second stage in the development is illustrated in the style of Narasinha Varman I (Vatapi Konda, reigning about 625-650, the founder of the Mahavalipuram, the sea-side city of Mamallapuram.

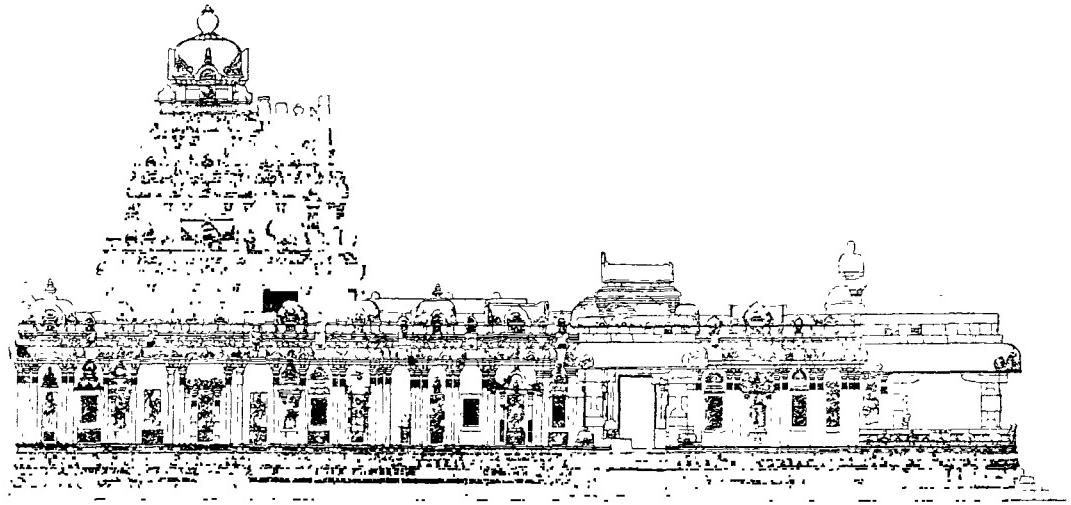


82 Shore Temple, Seven Pagodas, Mahabalipuram, 700-720 A.D. Style of Raja Sinha.

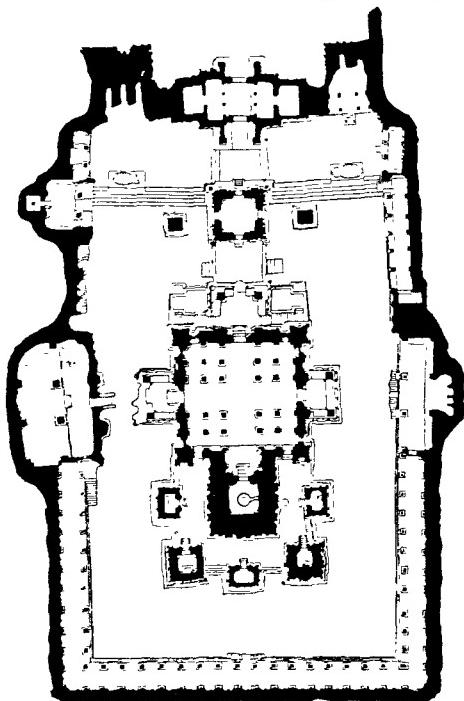
In his monuments the heavy pillars are replaced by elegant pillars with bulbous capitals, supported by squatting lions, the heraldic symbols of the Pallavas. It is under Rajasinha of Kanchipuram (700-710) that a rock-cut Ratha is first replaced by a structural temple, built of dressed stones of which an early example is the Shore temple at Mahavalipuram (82). The noticeable feature is the pinnacle (chudamani) over the Stupika. The full fledged Pallava temple is represented by the famous Kailasanatha temple (700 A.D.), also called Raja Simhesvara temple at Conjeveram (83), with its central tower and porch, later surrounded by richly sculptured rows of minor shrines spread round the whole quadrangle. It is said that the Chalukya king Vikramaditya II, (733-747) after he took Conjeveram, the capital of the Pallavas, was inspired by the model of the Raja Simhesvara temple, to build the famous Virupaksha temple at Pattadakal (84) for his queen Lokamahadevi.



83. Kailasanatha Temple. Conjeveram, Early 8th Century

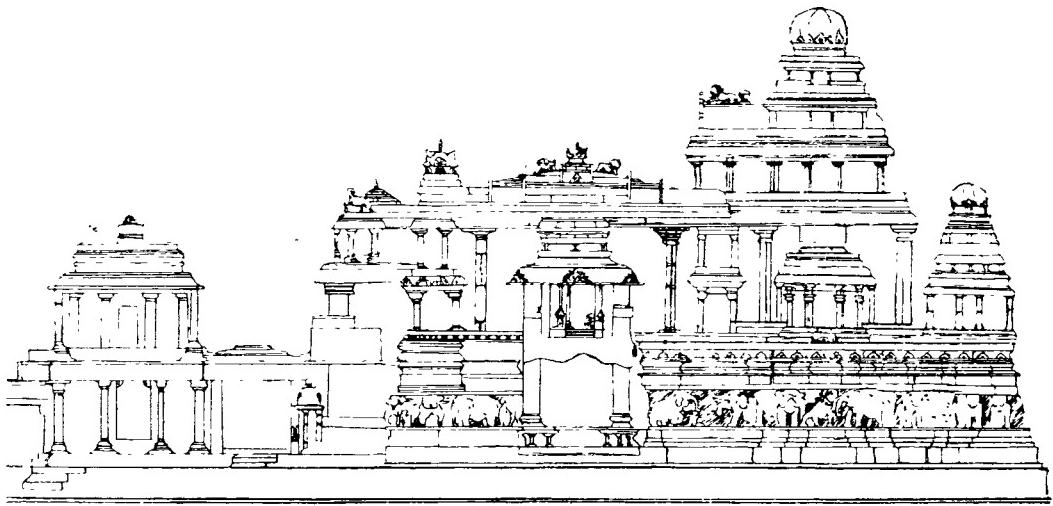


84 Virupaksha Temple, Pattadakal, (Elevation). 740. A.D.

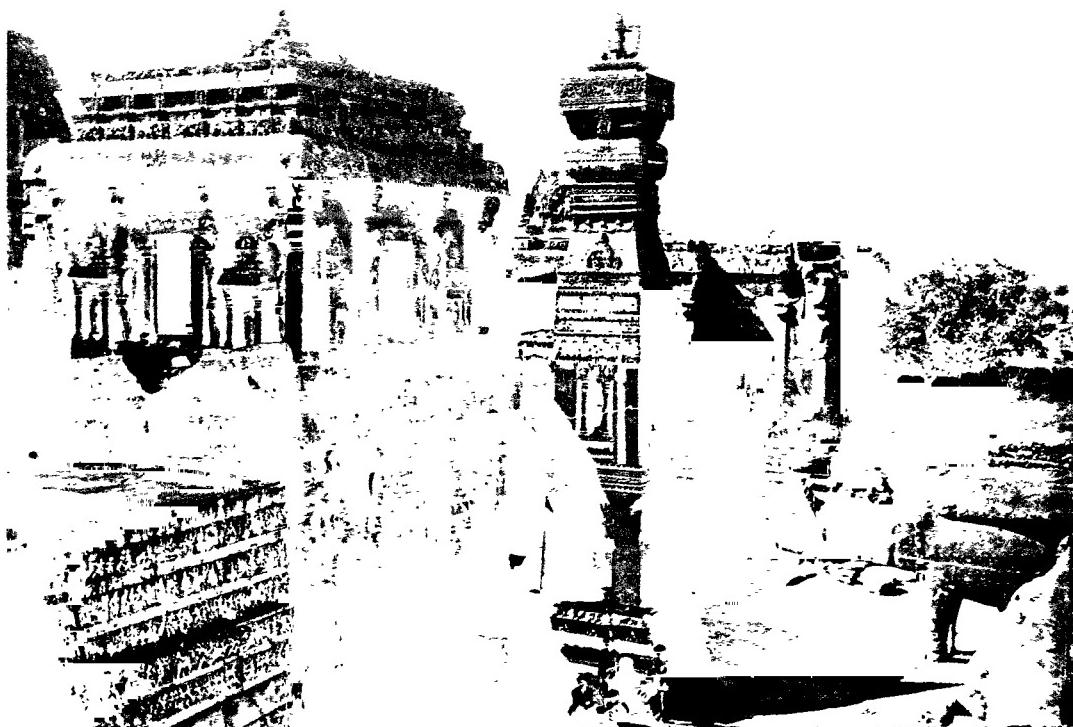


85. Plan of Rock-cut Shrine of Kailasa at Ellora.

Of the temples of the later Pallavas, the shrine of Muktesvara, is a very simple structure in the style of Raja-Sinha and belongs to the time of Nandivaram. The 'style of Rajasinha' is already heavy and ornate and lacking in the sobriety and the restraint of the temples at Mahavallipuram. The contact with the Chalukyas has helped to a migration of the Pallava style towards the West. But the remarkable example of the Dravidian style travelling further up is furnished by the famous rock-cut shrine of Kailasa at Ellora (85, 86). It is a monolithic structure built by the Rastrakuta King Krishna I about 760 A.D. It is more related to the temples of the Chalukyas rather than of the Pallavas, but the tower is typically "Dravidian" (87).



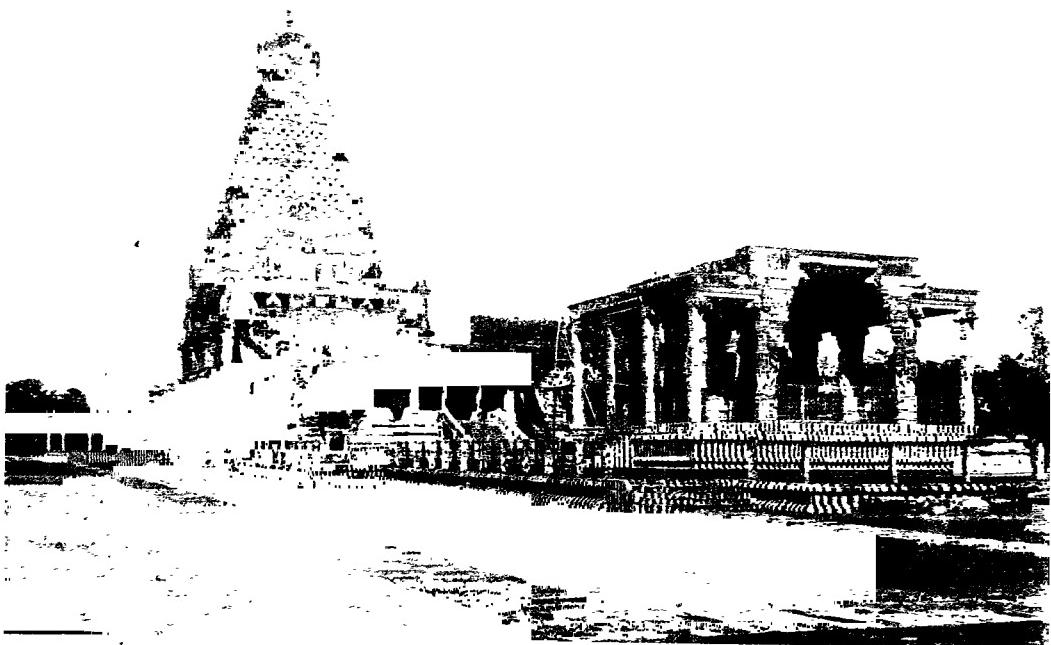
86. Section of Rock-cut Shrine of Kailasa at Ellora.



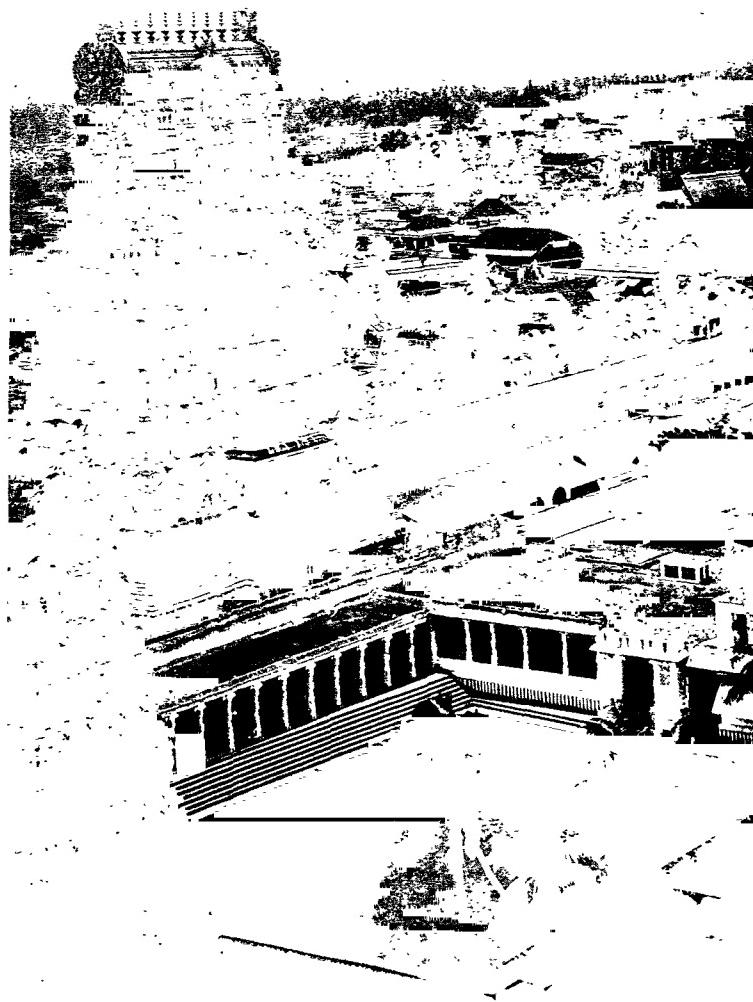
87. Kailasa Temple, Ellora 757—783 A.D.

In the meantime the decline of the Pallava power had helped the rise of the Cholas who, occupying the country roughly covered by the Tanjore and the Trichinopoly districts, made valuable contributions to the development of the Dravida style. Under the Cholas, not only the main tower, the Vimana, attained lofty heights, but there were interesting modifications of the Makara Torana and of the pillars which became slender and elegant. The arches (toranas) over the niches (*deva kosta*) are very characteristic features illustrated in the early Chola temples at Srinivasa nallur, and also at Cape Comorin. The typical Chola Vimana is best studied in the Siva temple at Tanjore, dedicated to Brihadisvara by Raja-Raja I about 1000 A.D. (88) and the temple at Gangai-konda-Cholapuram built by his son Rajendra Chola about 1025 A.D. It is from the time of the Chola builders that the Gopurams, the large gate-towers, so characteristic a feature of later Dravidian style first make their appearance and which gradually attain rather exaggerated proportions, putting to shade the main tower over the sanctuaries. The Pandyan and the Vijaynagara princes took great pride in building these lofty towers of which the most characteristic are those to be met with at Madura (89).

88 Brihadisvara Temple, Tanjore, 1000 A.D.



Another new feature of the development of the Dravida style, during the Chola and Pandyan epoch, is the building of large Mandapams or pavilions, supported by elaborately carved pillars, which are designed and carved in intricate forms and patterns and sometimes carved in the forms of cars (rathas). These are best studied in the Nartana-sabha Mandapa (90) at Chidambaram and the many pillared-halls at Madura. As an impressive aggregate of numerous shrines connected by elaborate corridors,

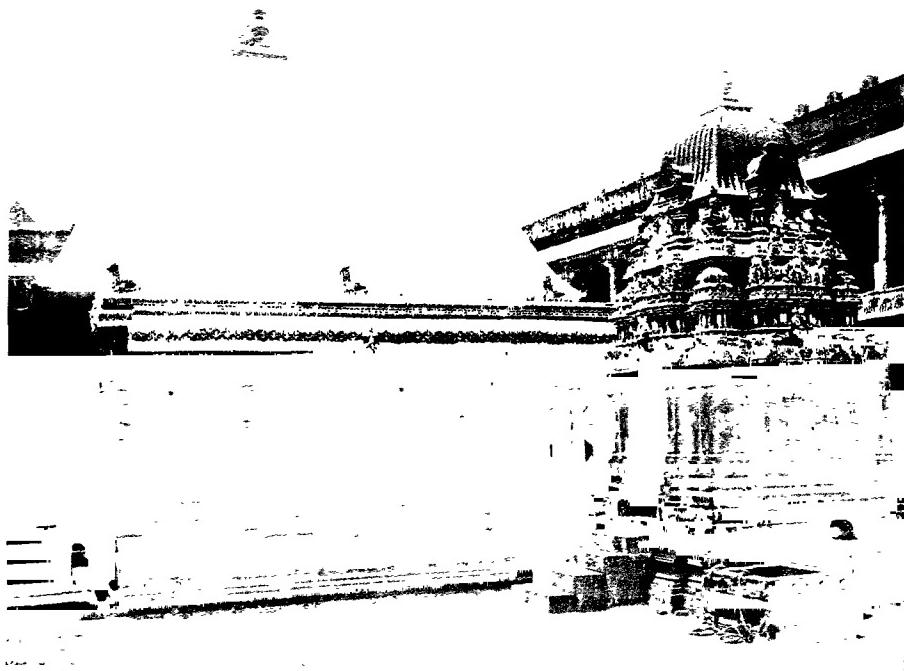


89. Gopuram, Minakshi Temple, Madura 17th Century.

porches and halls, the Chidambaran temples, which received magnificent donations from the Pandyan princes in the 13th century, probably present, for the first time, a full-fledged Southern shrine with all its complex features typically developed. The characteristic Pandyan style is best illustrated by the great Shiva temple at Avadaiyar Kovil, 32 miles from Pattukota (91). Built by a minister of a Pandyan prince about the 13th century, it is remarkable for its elaborately sculptured monolithic pillars. Of the architectural monuments that can be definitely ascribed to the Pandiyas is the famous Shiva temple at Tinnevelly. It is designed on quite a magnificent scale, its principal feature being the long corridors with sculptured pillars. One of these corridors contains a gallery of portraits of the Pandyan princes (92). The long corridors of this temple appear to forestall the famous corridors of Ramesvaram. From the Pandyan epoch, there is a tendency in Southern Indian architecture to create an impression by sheer magnitude, rather than elegance of design, and the progress of architecture is chiefly concerned with carving gigantic monolithic pillars.

It is on the revival of Hindu culture under the patronage of the Vijaynagara dynasty that Dravidian architecture appears to turn a new leaf. There is an

90. Temple of Chidambaran, 13th Century.

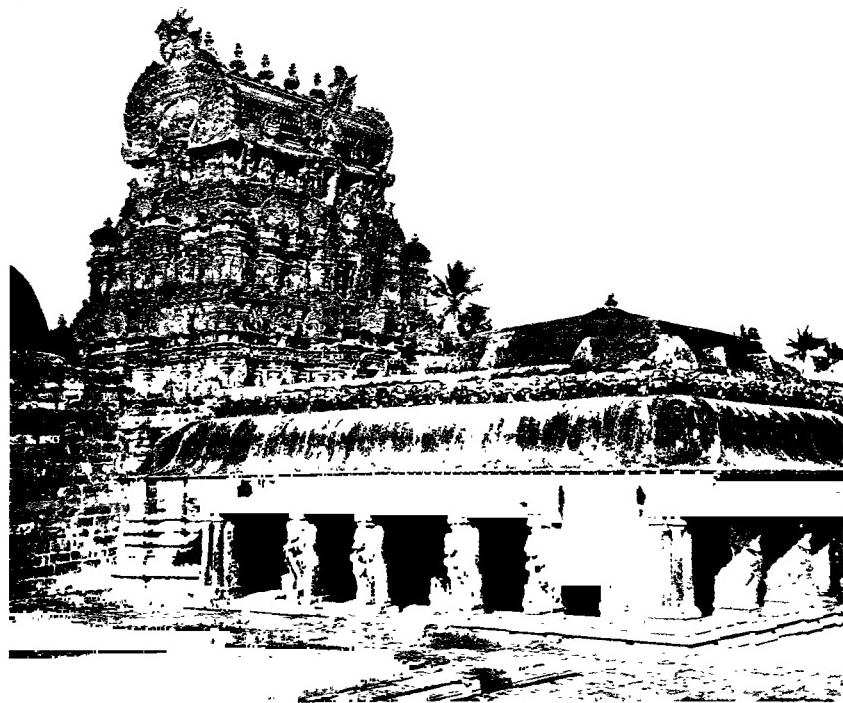


attempt to restore, renovate and to add embellishments to almost all the shrines of Southern India. Most of the surviving Gopurams of Southern Indian temples date from this period and owe their height to the architectural ambition of the princes of Vijayanagara.

But the characteristic features of the Vijayanagara epoch are the use of rows of miniature towers over the Mandapams which lend a singular grace to the temples (93). The shrine of Vithala-Raja at Vijayanagara (1513-1542) is a typical example. For sheer beauty of chaste but minute ornamentation, the unfinished temple (1507-1531) at Tadputri in the district of Anantapur is unrivalled. The temple inside the old Fort at Vellore is another of the master-pieces ascribed to this epoch. The famous Kalyana Mandapa of this shrine with magnificently carved pillars is deservedly famous for its chaste and vigorous carvings.

After the fall of the Vijayanagara dynasty the Nayakas, originally the Vice-roys of Vijayanagara, made themselves masters of Madura and the neighbouring tracts. They tried to keep up the architectural traditions of their predecessors, and imitated the lavish religious charities of their masters. The sanctuary of the great temple at Madura is attributed to Visvanath Nayaka (1559) but very probably he rebuilt or renovated the old structure.

91. Mandapa,
Avadaiyar
Kovil, 14th
Century.



The Hall of 1000 Pillars, built in 1560, is a characteristic example of Nayaka architecture. But the most representative building of the period is the famous Choultry or travellers' resting place of Tirumala Nayaka (1645), designed on a very ambitious scale; the style is rather florid and merely ostentatious without any elegance or originality, the principal feature being the pillar caryatides in elaborately carved sculptures. To the same style belong the famous corridors at Ramesvaram built by the Setupati Rajas of Ramnad in the 17th century. A special feature of Southern Indian architecture throughout its history has been the intimate use and adoption of sculptural forms to architectural purposes.

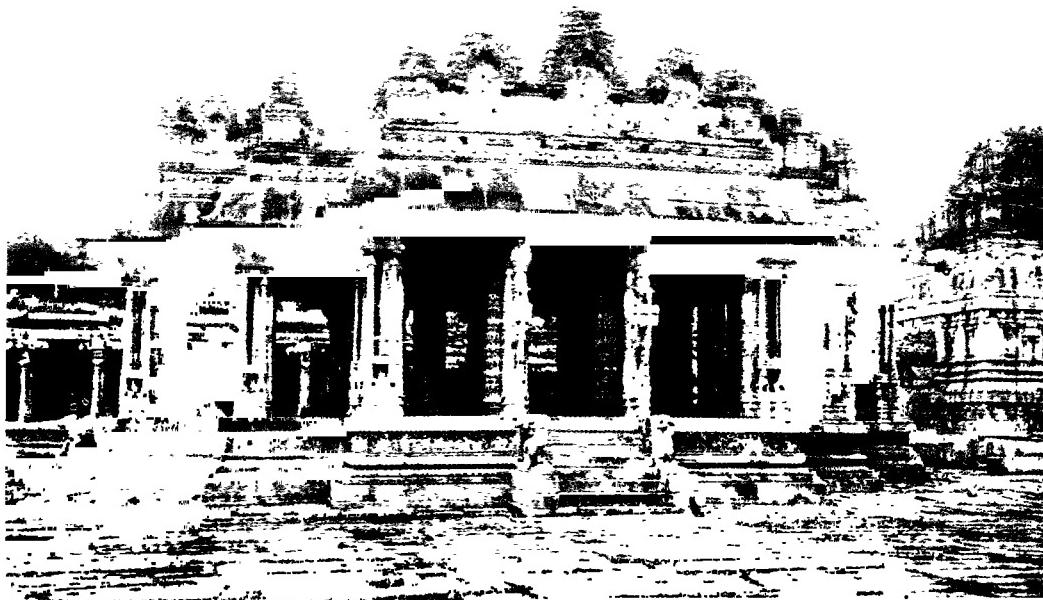


92. Corridor, Shiva Temple,
Tinnevelley, 13th Century

The stories from the Puranas with the figures and images of outstanding deities are skilfully woven into the pillars in remarkable unity with their architectural designs. The living traditions of the Dravida school have made many new contributions to the architecture of the 20th century. That the order was still capable of producing masterpieces, up to a very late date, is best illustrated by the magnificent little temple of Subramanya at Tanjore (94) dated about the 18th century. For its minute decorative craftsmanship it has justly been compared to the work of goldsmiths.

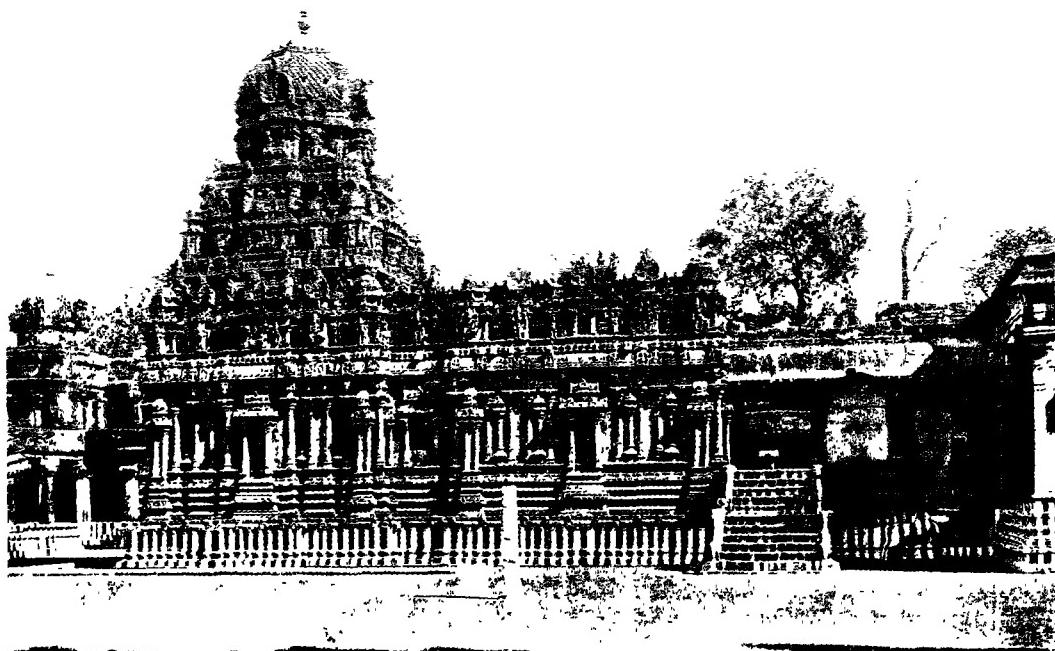
It remains to notice the architecture of the later Chalukyas (10th to 12th century) which is almost contemporary with the Cholas and Pandavas. The style appears to be an admixture of the Southern and the Northern order, with some marked peculiarities. It is identified by some scholars, as representing the Vesara class of the Silpasastras. The principal features of the style are the relatively low elevation and wide extension, star-shaped plan, and grouping of multiple shrines, and its new forms of pillars (95, 96, 97). The tower has a distinctive character, in its pyramidal shape, almost circular in form, and as distinguished from the Dravidian towers, the storeys of the towers are not emphasized.

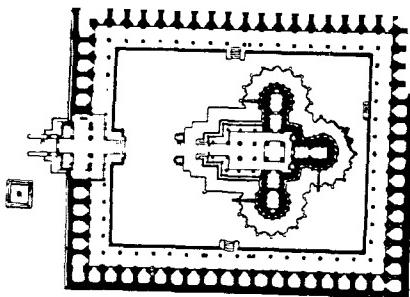
93. Vitthala-rama Temple, Vijayanagara, 17th Century.



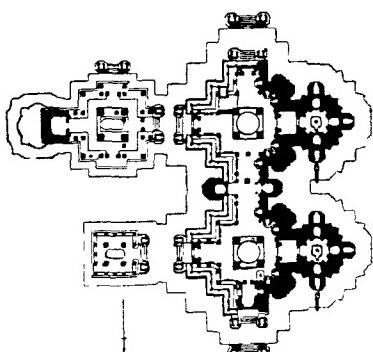
The general effect is that of a ribbed cone, very minutely carved. Indeed this inclination to carve and decorate every surface of the temple is sometimes taken to tiresome extremes and injures the effect of the general design and the silhouette. The cradle of the style is in the district of Dharwar and representative examples of the earlier phases (10th-11th centuries) occur at or near Ittagi and Godag. The temples have greater affinities to the Dravidian style proper. The style attains its highest development in Mysore under the Hoyasala dynasty, the principal examples being at Somanathpur, Belur and Halebid. The best illustration of the earlier style (12th century) is the temple of Dodda Basavanna or Basappa at Dombal in the Dharwar district. The star-shaped forms, its cell and porch are evolved with the help of numerous rectangular points and its Sikhara is quite original in treatment. The later developments, in the examples in Mysore, are more concerned with the elaborate and minute ornamentation of the surface than with any original presentation of new forms. The main features are the somewhat excessive decorations on the base (Upapita), excellently carved Makara-Torana reliefs over arches, and pierced screens of all varieties of geometrical designs.

94. Temple of Subramanya, Tanjore, 18th Century.

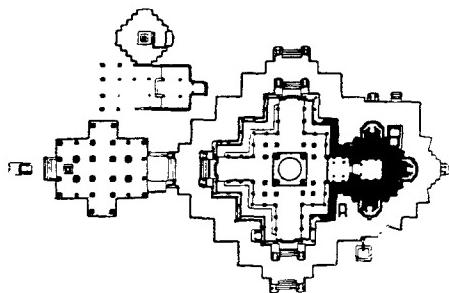




95. Plan of Kesavanatha Temple,
Somanathapura.



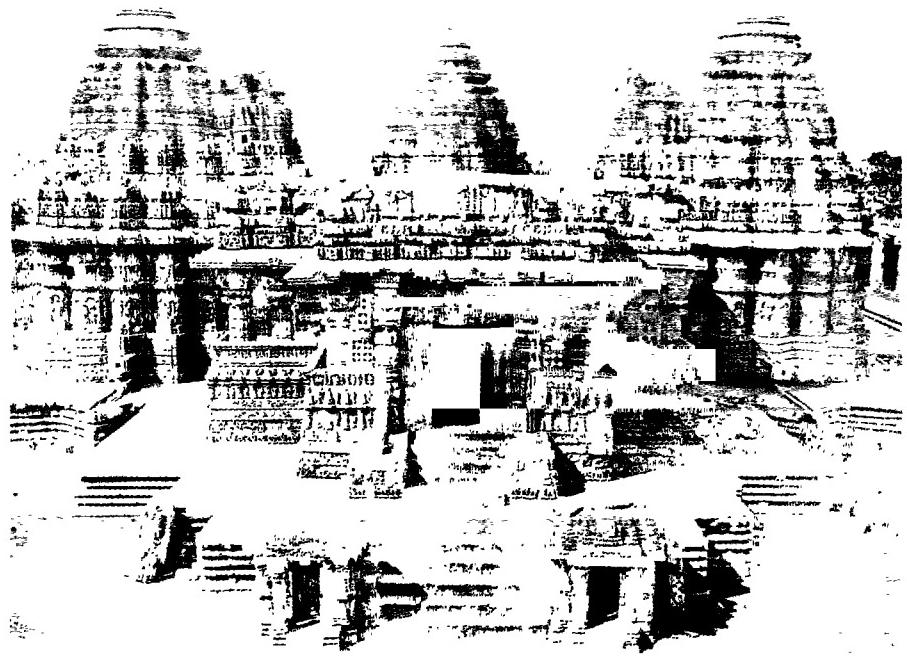
96. Plan of Hoyasalesvara Temple, Halebid.



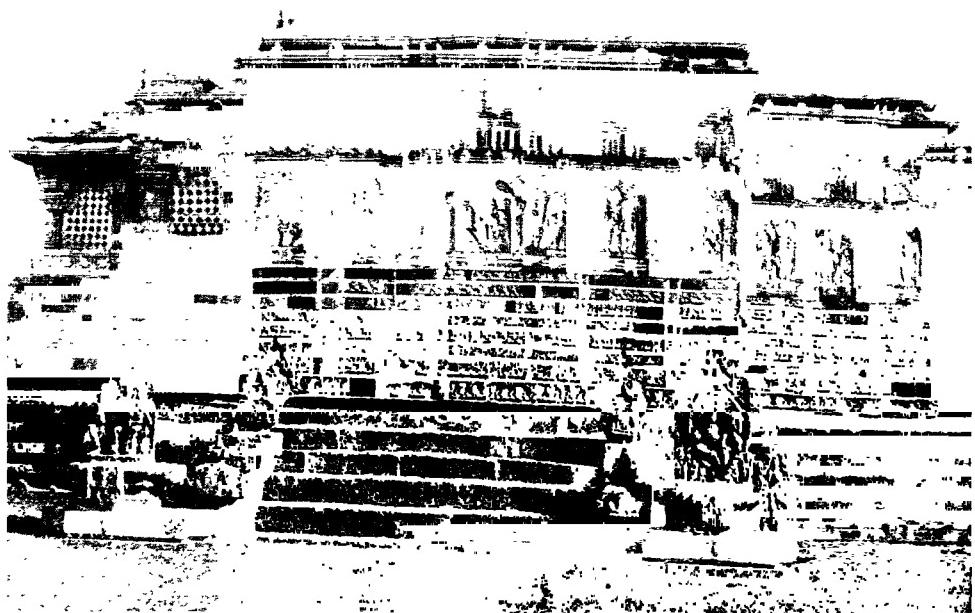
97. Plan of Chenna Kesava Temple, Belur.

The effect is produced more by the profusion of detail rather than by perfection of outline. The Kesava temple at Somnathapura (20 miles from Seringapatam) built by the prime minister of Narasimha III (1254-1291) is the finest example of the later Chalukyan order, (98) better described by the term "Hoyasala style" from the Hoyasala Vallala dynasty reigning in Mysore for three centuries (1000-1300). The Kesava temple is a triple shrine, elegantly grouped round a central hall and standing on a platform in the centre of a cloistered court. The unity of the plan emphasizes the effect of impressive grandeur. The examples of the style at Halabeid, (Dorasamudram), the later capital of the Hoyasalas, Kedaresvara temple (1219) (99) and Hoyasalesvara (1311) are chiefly characterised by a richness of effect and by the profusion of sculptures decorating their surfaces from top to bottom. The Mahomedan conquest in 1311 brought the further development of the style to an abrupt termination.

Such in brief is a bird's eye view of Indian architecture in its main outlines, its outstanding orders, types, and characteristics. The varying forms and types have been evolved from time to time, sometimes under the stress of the medium employed, and sometimes under the dictates of religious aspirations, rituals, and beliefs. On the whole, the different forms, whatever their origins, have been indiscriminately employed by adherents of different cults and religious beliefs. And though employed by adherents of different creeds, it cannot be definitely asserted that any particular form has derived its origin



98. Temple at Somanathapura, Mysore, 1270 A. D.

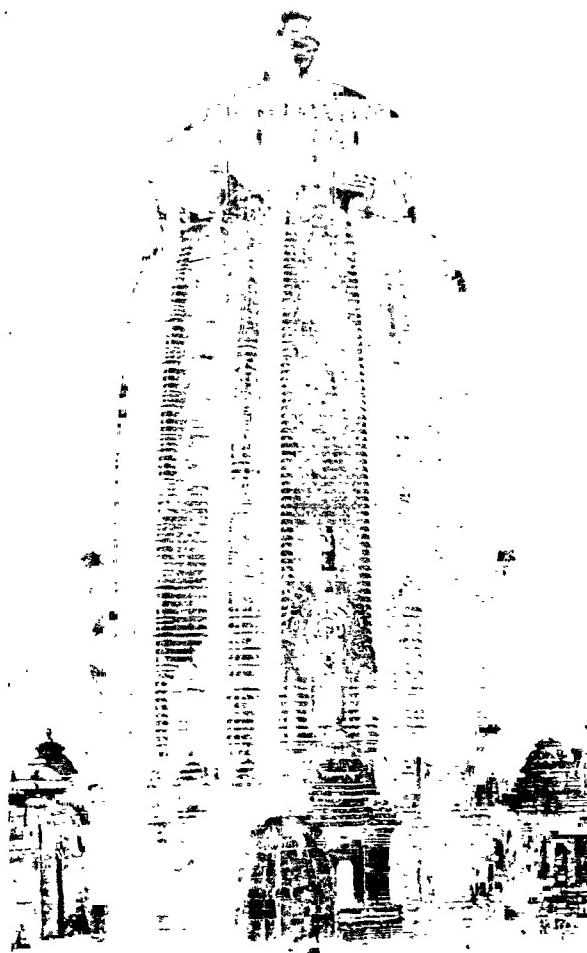


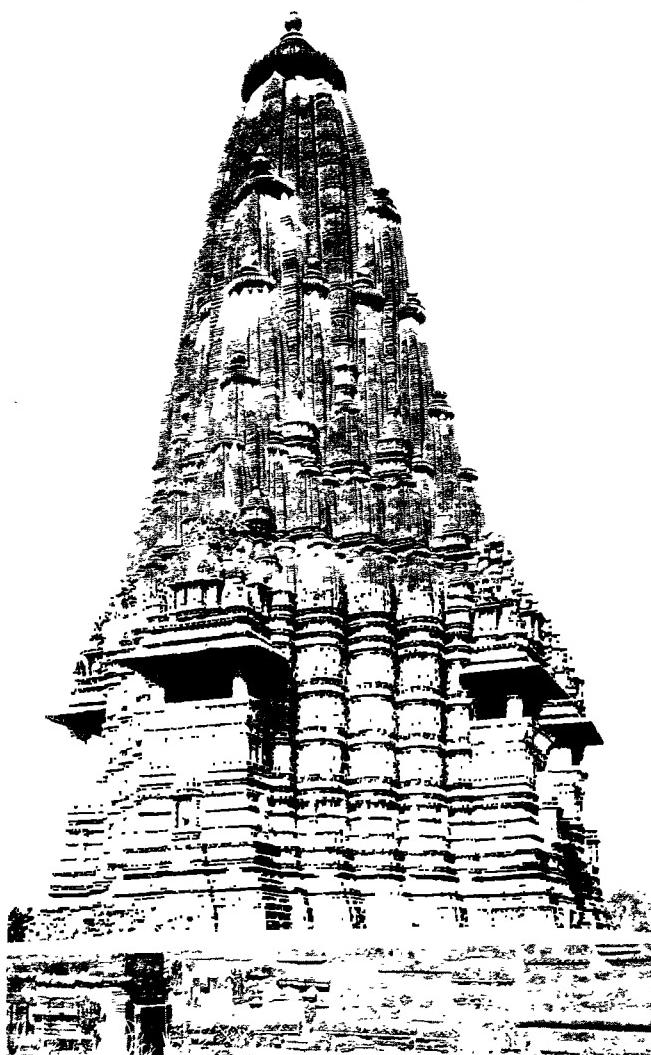
99. Kedaresvara Temple, Halebeid, Mysore, 1220 A. D.

from any particular religious sect. Thus, it is a misnomer to designate any type of Indian architecture as specifically Buddhistic, Jain, or Brahminical. It is Indian architecture for the time being in the service of one or other religion prevailing at a particular place or time. Thus the archaic Vedic mounds, dating before the Buddhist periods, came to be adopted by the Buddhists for their Dagobas, relic-shrines, or Stupas. Similarly, the Northern Indian Nagara tower-shrines not only serve as Shiva and Vishnu temples, but also as the 'image-house' for many Jaina temples at Khajuraho. The finials of Nagara Sikkharas are equally adopted in many Buddhist shrines in Burma. The forms of the Chalukyan or the later Hoyasala order are indiscriminately used for a Hindu or a Jaina shrine. The barrel shaped Vesara temples of early Buddhistic uses have been adopted in toto for Brahminical shrines (45). In fact, the monolithic temples at Mahavallipuram are lineal descendants of the earlier Buddhist Viharas, while the great Mahabodhi temple at Bodh-Gaya, with its conical tower, and its Kalasa (63) is after all an archaic form of the curvilinear Sikkha temple of the north.

One of the peculiar characters of Indian architecture is its innate inclination to transcend its structural form. An Indian temple, be it Buddhistic, Jaina, or Hindu is a monument par excellence rather than a mere utilitarian covering or a shelter from heat and rain. Indian architecture always attempts to cover the form necessitated by its structural scheme under the cloak of a symbol; and its decided inclination is to achieve a plastic pattern. Fundamentally an image-house, the Indian

100 Lingaraja Temple, Bhuwanesvara,
Orissa, Circa 1000 A.D.





101. Kandarya Mahadeo Temple, Khajuraho, Circa 1000 A.D.

monolithic pillars and caryatides which literally totter under the weight of the gallery of portraits of gods, kings, men and animals. Every part of the architectural form tends to swell into a figure. Indeed sculpture is regarded as an organic part of architecture and inevitably springs from all kinds of structural forms. Even in the comparatively simpler designs of Northern Indian temples the pillars are figured in the lyrical forms of

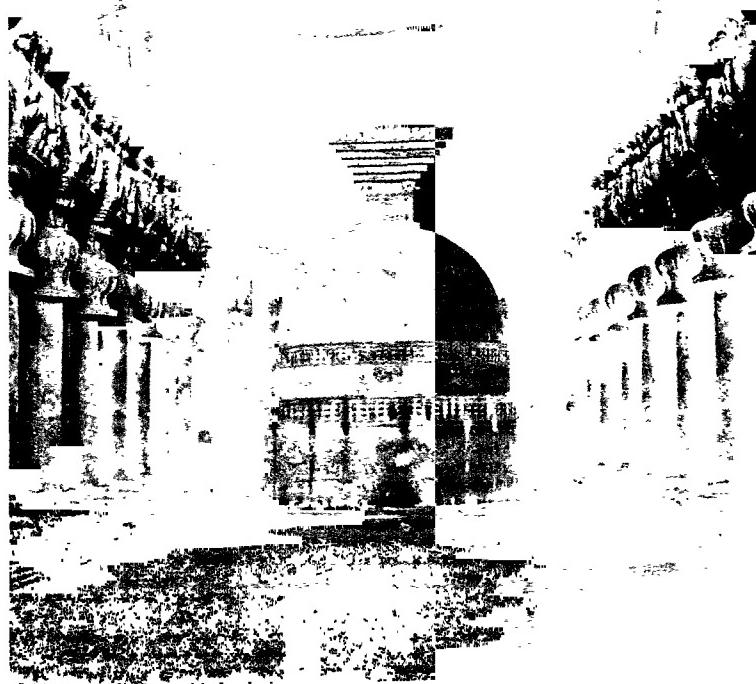
temple aspires to the form of the image itself. This sculpturesque treatment of the structural form is almost a habit with the Indian architect. The Buddhist Stupa is not merely an elaborate casket for a holy relic but easily symbolises the image of a seated Buddha, with his head crowned by a series of concentric Chhatras. The long perpendicular lines of the Vimana of the Lingaraja temple (100) with its stately crown of Amalaka is the true picture of a gigantic Siva Lingam, not merely a stone covering for it. The typical temple of the Khajuraho group (101) with its shoulders spread out, looks like a veritable image of Vishnu, carrying an elegant Mukuta. The stately Gopurams of the Dravidian temples (89) are pictured, as it were, in the outlines of deified forms. They impress you with the presence of the divinity itself. This sculptural habit finds ample scope in many details of the Southern temples in devising gigantic

elaborate vases from which sprout all kinds of ornamental plants in the glory of their tropical luxuriance, which make one forget that a pillar, after all, is a useful though a somewhat prosaic prop for carrying weight. The aesthetic beauty of Indian architecture derives its quality from the expression of a plastic idea, the result of an image-making, an idolatrous instinct rather than that of a purposeful structural design.

The forms of some of the types can be related to the symbolism of Indian metaphysical thought. Thus the theory of rebirths, adopted both by the Brahminical and Buddhist creeds, according to which the numerous cycles of births and re-births leading to a variety of life-forms, rising higher and higher and growing narrower until matter (*jivatma*) becomes absorbed and united with the divinity (*Brahmatma*), was undoubtedly of the greatest significance in determining that form which occurs in the temples with conical towers which

diminish and taper off to a spire. Thus the types of architecture are microcosmic mirrors of the macrocosm and therefore had to be shaped in accordance with the principle of totality which symbolises universality in the world of matter. Indian architecture is thus a monumental expression of metaphysical symbolism (Diez).

We have hardly space to offer comments on all the outstanding masterpieces which are



102 Chaitya Hall, Karli,
1st Cent. B.C.

fully covered by the illustrations, but a few words of tribute may be useful to those who have not yet developed a taste for Indian architecture.

On the broad shoulders of a little hillock at Sanchi, the Buddhists of old have bequeathed to India its great and marvellously carved Stonehenge which the Druids could never dream of, and whose majestic solemnity is guarded by stately Toranas which spread their cyclopean wings to overawe the vulgar and the philistine into silent reverence (23). And when the Stupa is transferred into long and deep recesses of gigantic rocks, the Buddhist cave-temples, as at Karli and Bhaja, resound with the music of the Trisarana* under the mystic shadows of the ribbed dome—the sloping lines of which descend to be petrified in the emphatic forms of the prismatic pillars which carry, on their lotus cushions, capitals of human and animal motifs the meaning of which baffles scholars and antiquarians (102).

And when the Chaitya shrine expands to the spacious and magnificently frescoed Viharas at Ajanta, the dim religious lights of the Cave temples sparkle on the expansive walls, exquisitely frescoed, between the interstices of the gigantic pillars, to induce a deep and spiritual contemplation. (40).

When the Imperial Guptas raise a tiny flat-roofed Hindu temple, to mock the great Stupa at Sanchi, its crude, clumsy and dwarf pillars, still carrying the aroma of the hoary archaism of the caves, spell out in no uncertain terms, in its strongly marked horizontal construction, a strength and a repose which easily recall, if it cannot rival, the temple of Neptune at Paestum.

When the martial Pallava princes seek to celebrate their victories on the field of battle by erecting new temples on the shores of the sea, the old Viharas rear up their heads in novel but tiny monoliths on the now forgotten sands of the sea-shore at Mahabalipuram. As new but mysterious shrines of Shiva, the tiny Rathas of the Pallavas, spell out a monumental quality in their solitary grandeur (28, 35, 36, 37).

And when the Dravidian Sthapatī (architect) sends a message to the Rashtrakuta prince at Ellora (73), the monolithic Kailasa is violently twirled and shot out of the living rock to echo the peak of the Himalayas in miniature magnificence.

The early Chalukyan princes of Badami (Vatapipura) conquer Kanchi to be conquered in their turn by its artistic monuments which they seek to transplant, and, in the attempt, the Pallava temple achieves a rich expansiveness in a new environment.

The Ganga and the Kesari kings of Kalinga offer their tribute to their Ista-devata (the gods after their own hearts), and their pious offerings incarnate in a new form in the stately Sikhara temples of Bhuvanesvara, Puri and Konarak whose spires rival the Gothic cathedrals as they spring from grave and meditative Amalakas to reach the heavens (103).

*Buddha, Dharma, and Sangha (community), the 'three refuges' of Buddhism are embodied in a formula often repeated by pilgrims "Buddhism saranam gacchami, Dharmam saranam gacchami, Sangham gacchami

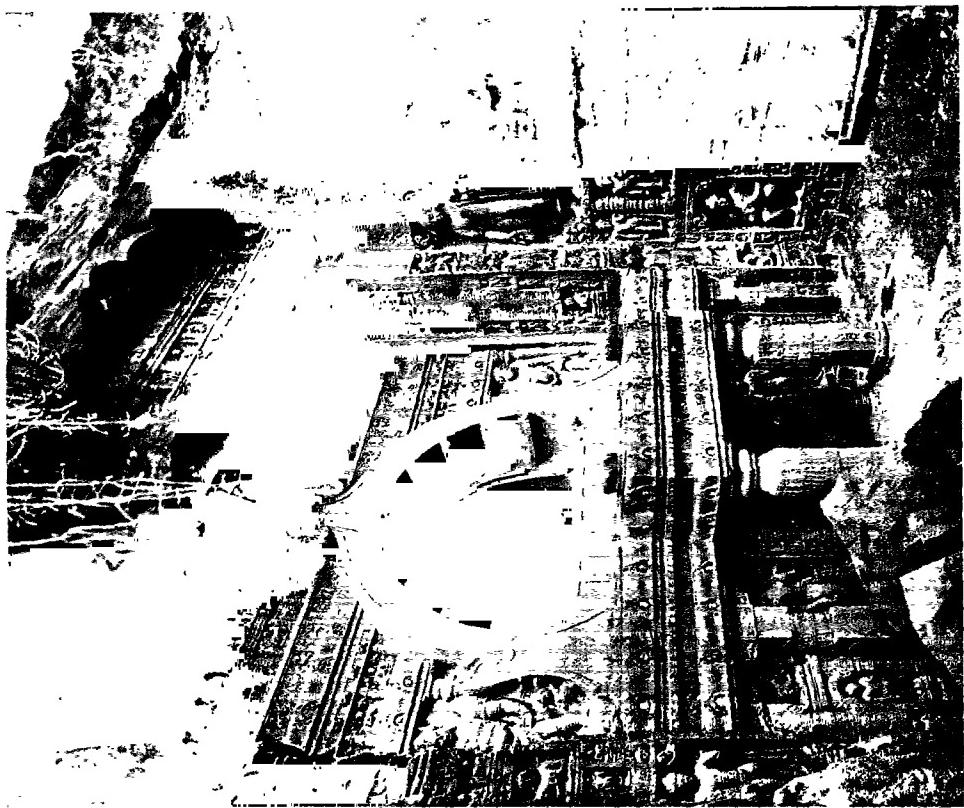
The same types are borrowed and richly developed, by the devout princes of Bundelkhand, for, the temples of Khajuraho, do indeed improve and perfect the earlier pattern by many novel features, mainly by a skilful emphasis on verticals, which give an illusion of greater height (101).

When the devotees of Jina seek to worship their Tirthamkaras in the deserts of Rajputana, their prayers crystallize in the wonderful temples of Mount Abu, which in aesthetic exuberance eclipse all the other monuments of India. The whiteness of the marble symbolises the passionless purity of their ascetic faith, as the astounding profuseness of the marvellous traceries of the fairy ceilings reflect the eloquence of their devout munificence as they put to shade the pendants of Westminster Abbey (71).

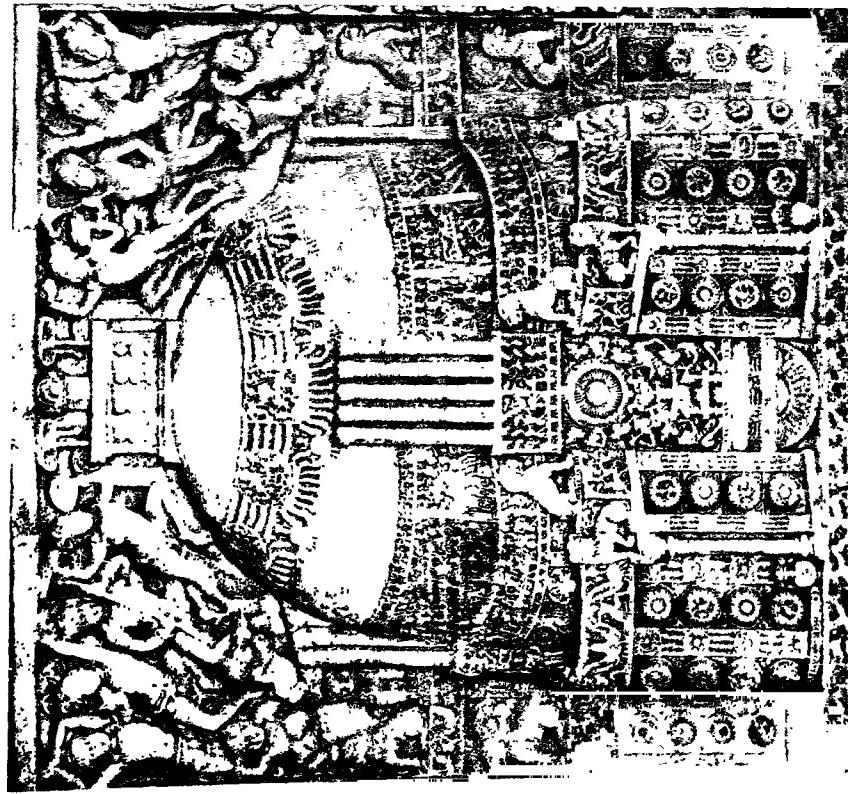
The shrines of the South, built piece-meal, without any generous or comprehensive plan, by the successive tributes of Chola, Pandya, and Nayakka princes (unlike the temples of the North, mostly built straight off under the impulse of a single epoch, and generally lacking in a unity of design, make up, in their magnificence and stupendous scale, for their poverty of elegance and dignity. The silhouettes of their Vimanas and Gopurams as the mystic grandeur of their never-ending corridors and pillared Mandapams overawe one by a crude impressiveness rare in the temples of the North. The richly carved Mandapams with their monolithic pillars and the facades of the temples broken into exquisitely carved niches invest Indian architecture with a new plastic quality, and entwine architecture and sculpture into one indissoluble unity. The gift of India is indeed a rich and a valuable one to the architecture of the world.

103. Rajarani Temple, Bhuwaneswara, Circa 1150 A.D.

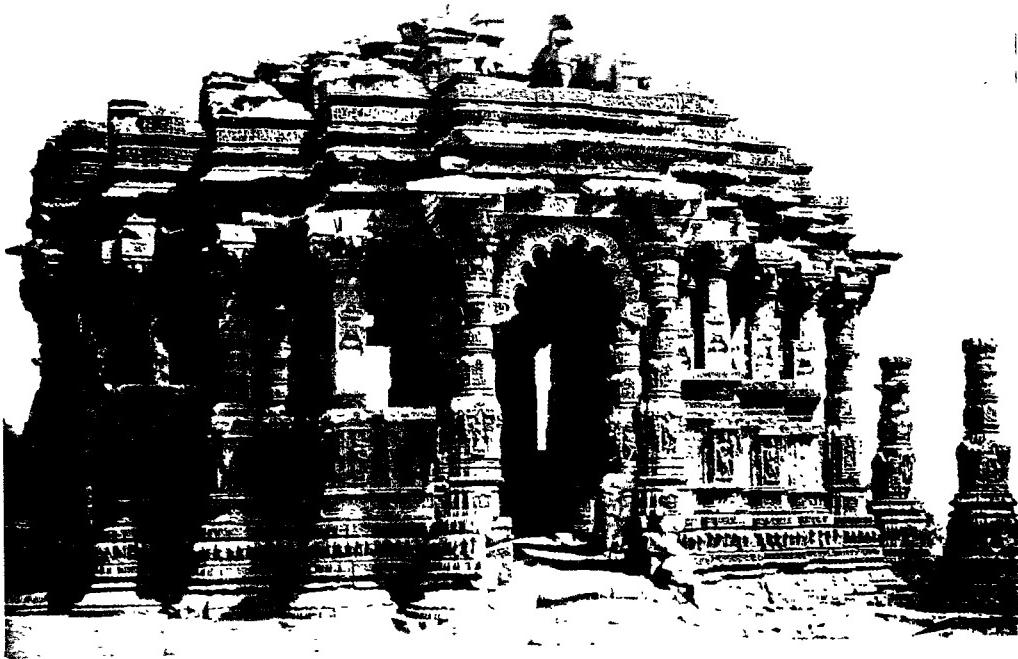




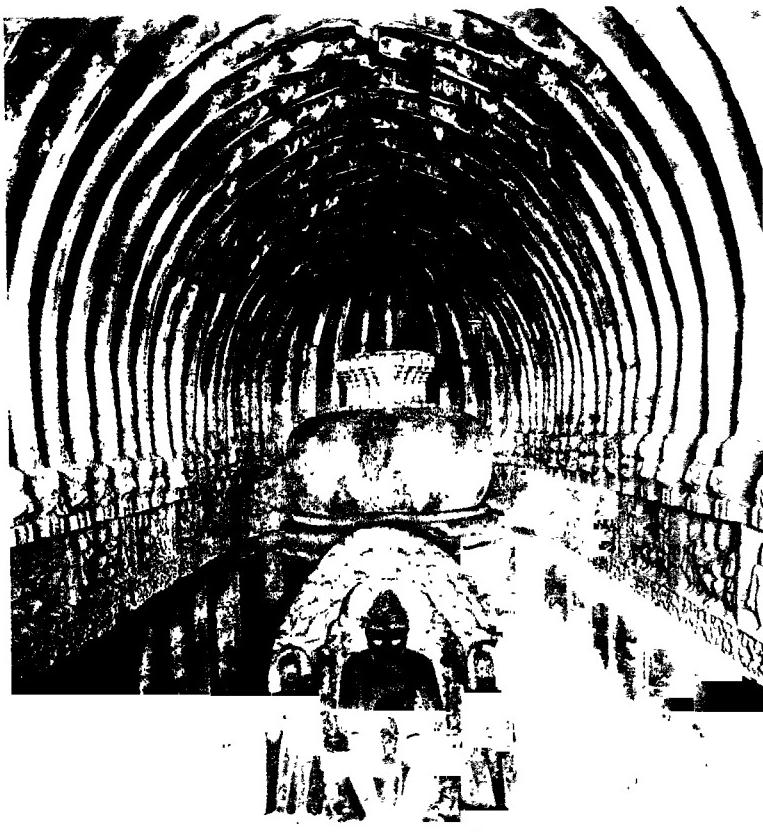
104. Carved Representation of Stupa, Amaravati, Late 2nd Century A.D.



105. Facade of Chaitya-Hall, Cave XIX, Ajanta, 6th Century A.D.

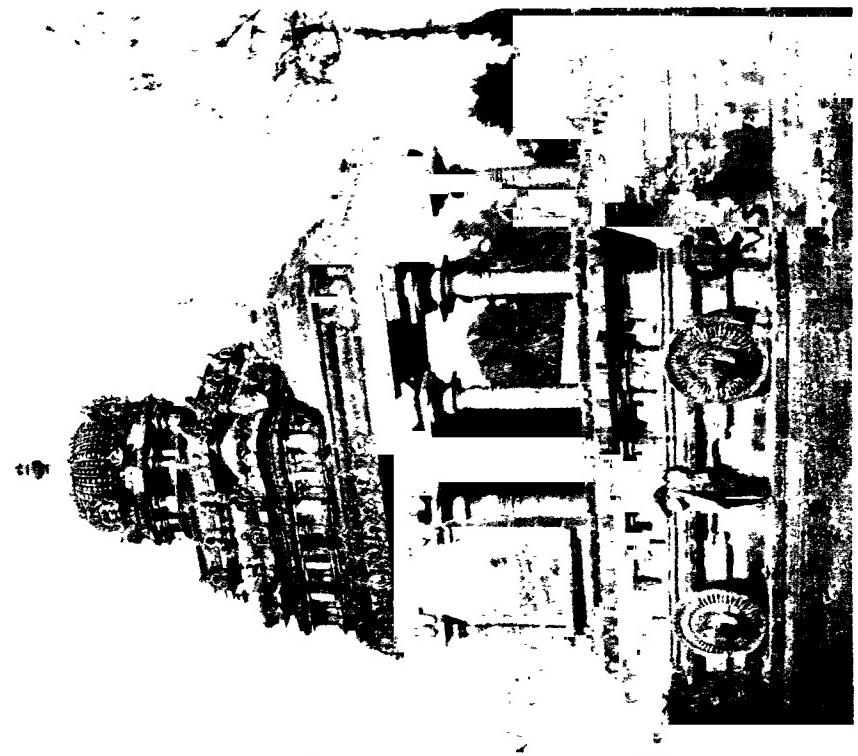


106. Sun Temple,
Modhera, Gujarat,
11th Cent. A.D.

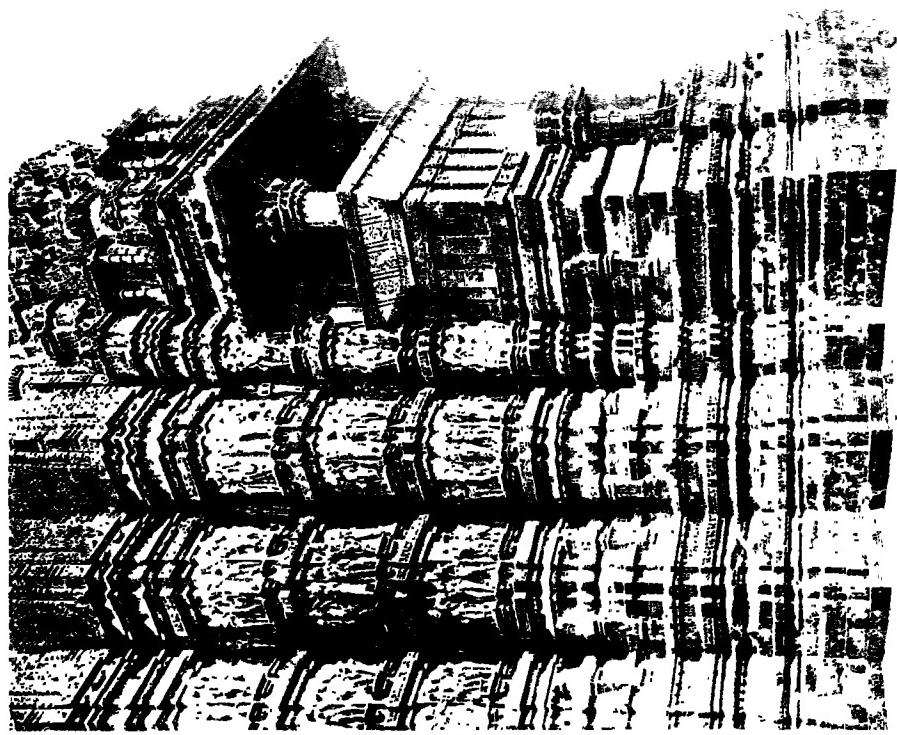


107. Interior of Visva-
karma Buddhist Cave,
Ellora Circa 7th Cent.
A.D.

108. Ratha Temple, Tiruvarur, Negapatam, Circa 14th Cent.



109. Detail from Kandarya Mahadeo Temple, Khajuraho.





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